The *Mathematical Intelligencer* Cumulative Index

Authors

Abe, Takehisa. See Gustafson, Karl, and Abe, Takehisa.

Acker, Felipe. The missing link. (18.3) 4–9.

Acker, Felipe. Felipe Acker replies. (19.3) 7.

Adams, Colin C. Tilings of space by knotted tiles. (17.2) 41–51.

Adler, Allan. Magic cubes and the 3-adic zeta function. (14.3) 14–23.

Aebi, Robert. Schrödinger's time-reversal of natural laws. (18.2) 62–67.

Ahlfors, Lars. The story of a friendship: recollections of Arne Beurling. (15.3) 25–27.

Akin, Ethan. The spiteful computer: a determinism paradox. (14.2) 45–47.

Akin, Ethan. Akin replies. (15.2) 4–5.

Akin, Ethan. Ethan Akin responds. (16.2) 3

Akin, Ethan. "Chaos unimportant," claims topologist. (16.4) 45–47.

Albree, Joe. Salem's Bowditch. (14.1) 58–60.

Alexander, C., Giblin, I., and Newton, D. Symmetry groups of fractals. (14.2) 32–38.

Anderson, Philip W. Review of *The New Physics*, edited by Paul Davies. (14.1) 70–71.

Andrews, George E. Review of *Ramanujan's Notebooks, Part III*, by Bruce C. Berndt. (16.3) 69–71.

Andrews, George E. The death of proof? Semi-rigorous mathematics? You've got to be kidding! (16.4) 16–18.

Angell, Thomas S. Review of *A Course on Integral Equations*, by Allen C. Pipkin. (16.1) 63–67.

Angell, Thomas S. Review of *Integral Equations: A Practical Treatment From Spectral Theory to Applications*, by David Porter and David G. Stirling. (16.1) 63–67.

Angell, Thomas S. Review of *Linear Integral Equations*, by Rainer Kress. (16.1) 63–67.

Angell, Thomas S. Review of *Integral Equations and Applications*, by Constantin Corduneanu. (16.1) 63–67.

Anglin, W.S. Mathematics and history. (14.4) 6–12.

Anglin, W.S., Pythagoras and Crotone. (19.1) 39–40.

Apéry, François. Roger Apéry, 1916–1994: a radical mathematician. (18.2) 54–61.

Arcavi, Abraham. See Bruckheimer, Maxim, and Arcavi, Abraham.

Arnold, V.I. Will mathematics survive? Report on the Zurich congress. (17.3) 6–10.

Artmann, Benno. Review of *Das Mittelalterliche Zahlenkampfspiel*, by Arno Borst. (11.3) 77–79.

Artmann, Benno. Review of *Rhythmomachia*, by Detlef Illmer. (11.3) 77–79.

Artmann, Benno. Mathematical motifs on Greek coins. (12.4) 43–50.

Artmann, Benno. Boy's surface. (13.2) 4.

Artmann, Benno. The Cloisters of Hauterive. (13.2) 44–49.

Artmann, Benno. Roman dodecahedra. (15.2) 52–53.

Artmann, Benno. Response to István Hargittai's imperial cuboctahedron. (15.4) 3.

Artmann, Benno. The liberal arts. (20.3) 40–41.

Askey, Richard and Nevai, Paul. Gabor Szegö: 1895–1985. (18.3) 10–22.

Aslaksen, Helmer. Quaternionic determinants. (18.3) 57–65.

Axler, Sheldon. Dedication to Allen Shields. (12.2) 3.

Axler, Sheldon. Farewell. (13.4) 3.

Axler, Sheldon. Sheldon Axler replies. (14.2) 4.

Baas, Nils A. Sophus Lie. (16.1) 16–19.

Bach, Craig N. Review of *Logical Dilemmas: The Life and Work of Kurt Gödel*, by John W. Dawson, Jr. (20.4) 61–64.

Baez, John C. Review of *The Physical Basis of the Direction of Time*, by H.D. Zeh. (16.1) 72–75.

Bagchi, Bhaskar. Zero-one matrices. (12.2) 26.

Bagni, Giorgio Tomaso, Riccati's Grave in the Cathedral of Treviso (Italy). (19.2) 49.

Bailey, D.H., Borwein, J., Borwein, P.B., and Plouffe, S. The Quest for pi. (19.1) 50–57.

Baker, Daniel. Some topological problems in robotics. (12.1) 66–76.

Barg, Alexander. At the dawn of the theory of codes. (15.1) 20–26.

Barrow-Green, June. International Congresses of Mathematicians from Zurich 1897 to Cambridge 1912. (16.2) 38–41.

Barrow-Green, June, and Wilson, Robin. Mathematical Prizes. (19.4) 76.

Barwise, Jon, and Moss, Larry. Hypersets. (13.4) 31–41.

Bauer, F.L. A series from the Karanapaddhati. (17.3) 3–4.

Bauer, F.L. An infinite product for square-rooting with cubic convergence. (20.1) 13 and 38.

Bauer, Robert M. ET and an infinitary Church's thesis. (17.3) 57–61.

Beardon, A.F. Symmetries of Julia sets. (18.1) 43–44.

Beaulieu, Liliane. A Parisian café and ten proto-Bourbaki meetings (1934–1935). (15.1) 27–35.

Beck, Anatole. The decimal dysfunction. (17.1) 5–7.

Bell, John L. Infinitesimals and the continuum. (17.2) 55–57.

Bencivenga, Roberto. Calculus reform. (13.2) 4.

Betsch, Gerhard. The Kepler Museum and Kepler Monument. (11.1) 36.

Bier, Martin. A Transylvanian lineage. (14.2) 52–54.

Birkhoff, Garrett, and Mac Lane, Saunders. A survey of modernalgebra: the fiftieth anniversary of its publication. (14.1) 26–31.

Birman, Joan S. Recent developments in braid and link theory. (13.1) 52–60.

Birman, Joan S. On Shafarevich's Essay "Russophobia." (14.2) 3–4.

Block, Jonathan. Review of Noncommutative geometry, by Alain Connes. (20.1) 73–75.

Boas, R.P. When is a C^∞ function analytic? (11.4) 34–37.

Bodden, Ilona. Evariste Galois (sum total) (18.4) 34.

Bokuť, L.A. See Vershik, A.M., Viro, O. Ya., and Bokuť, L.A.

Bölling, Reinhard. A birthday present. (11.4) 20–25.

Bölling, Reinhard. . . . Deine Sonia: a reading from a burned letter (14.3) 24–30.
Bölling, Reinhard. An unknown photograph of Kovalevskaya. (20.3) 27–28.
Booss-Bavnbek, B. Memories and memorials. (17.2) 15–20.
Booss-Bavnbek, Bernhelm. Bernhelm Booss-Bavnbek replies. (18.1) 6.
Borcherds, Peter. Mirror Paradoxes. (19.2) 5.
Borwein, Jonathan M. Brouwer-Heyting sequences converge. (20.1) 14–15.
Borwein, J. See Bailey, D.H., Borwein, J., Borwein, P.B., and Plouffe, S.
Borwein, J., Borwein, P., Girgensohn, R. and Parnes, S. Making sense of experimental mathematics. (18.4) 12–18.
Borwein, P.B. See Bailey, D.H., Borwein, J., Borwein, P.B., and Plouffe, S.
Bos, Len. Review of *Curves and Surfaces for Computer Aided Geometric Design* (2nd ed), by Gerald Farin. (14.3) 66–68.
Bowers, Kenneth L. Review of *Numerical Methods Based on Sinc and Analytic Functions*, by Frank Stenger. (18.2) 71–73.
Brams, Steven J., Taylor, Alan D., and Zwicker, William S. Old and new moving-knife schemes. (17.4) 30–35.
Brehm, Ulrich. How to build minimal polyhedral models of the Boy surface. (12.4) 51–56.
Bressoud, David M. Review of *The Problems of Mathematics*, 2nd edition, by Ian Stewart. (15.4) 71–73.
Bressoud, David M. Review of *The Search for E.T. Bell Also Known As John Taine*, by Constance Reid. (16.3) 72–74.
Bressoud, David M. Review of *L'Aurore des Dieux*, by Jacques Dixmier. (16.3) 72–74.
Bressoud, David M. Review of *Undergraduate Analysis*: 2nd edition, by Serge A. Lang. (20.1) 76–77.
Brooks, Robert. The Mandelbrot set. (12.1) 3.
Brothers, Harlan J., and Knox, John A. New closed-form approximations to the logarithmic constant *e*. (20.4) 25–32.
Browder, Felix E. Stone age of mathematics at the Midway. (11.3) 22–24.
Brown, Ronald. Sculptures by John Robinson at the University of Wales, Bangor. (16.3) 62–64.
Bruckheimer, Maxim, and Arcavi, Abraham. Farey series and Pick's area theorem. (17.4) 64–67.
Bruckstein, Alfred M. Why the ant trails look so straight and nice. (15.2) 59–62.
Bruter, C.P., Hoarfrost patterns. (19.1) 37–38.
Bunge, Mario, Beppo Levi among physicists in Argentina. (19.1) 4.
Burckel, R.B. Review of *A Photo Album for Weierstrass*, edited by Reinhard Bölling. (18.1) 78–79.
Burger, Edward. Mathematics beyond the ivy-covered hall: can we read the writing on the wall? (20.2) 60–61.
Burton, David M. Review of *The Mathematics of Great Amateurs* (2nd ed), by Julian Lowell Coolidge. (14.3) 68–69.
Bush, George C. The ancient Hebrews and π. (20.4) 64.
Buskes, Gerard. In the shadow of Kepler and Galileo. (20.3) 45–46.
Buttazzo, Guiseppe and Kawohl, Bernhard. On Newton's problem of minimal resistance. (15.4) 7–12.
Byrne, Catriona. The left-handed Pythagoras. (12.3) 52–53.
Calderbank, A.R. The mathematics of modems. (13.3) 56–65.
Campbell-Kelly, M. Letter from Martin Campbell-Kelly. (16.4) 27–28.
Canfield, E. Rodney. Review of *generatingfunctionology*, by Herbert Wilf. (15.2) 71–75.
Cannon, J.W. Mathematics in marble and bronze: the sculpture of Helaman Rolfe Pratt Ferguson. (13.1) 30–39.
Cannon, J.W. Review of *Helaman Ferguson: mathematics in stone and bronze*, by Claire Ferguson. (18.2) 73–75.
Chaitin, Gregory J. Review of *A Diary on Information Theory*, by Alfred Rényi. (14.4) 69–70.
Chaleyat-Maurel, Mireille. Call for a logo. (19.2) 6.
Chern, Shiing-shen. Remarks on Hilbert's 23rd problem. (18.4) 7–8.
Cho, Zang-Hee. See Shepp, Lawrence A., Schuster, Seymour, Sadosky, Cora, Graham, Ronald L., Davis, C., and Cho, Zang-Hee.
Chowdhury, M.R. Hausdorff. (12.1) 4–5.
Chowdhury, M.R. The Apurba Chandra Datta collection. (12.4) 4.
Chowdhury, M.R. Landau and Teichmüller. (17.2) 12–14.
Christopher, Peter R., Mathematics in Albania. (19.1) 28–36.
Ciesielski, Krzysztof. How good is Lebesgue measure? (11.2) 54–58.
Ciesielski, Krzysztof. Janusz Onyszkiewicz. (12.4) 40–41.
Ciesielski, Krzysztof. As others see us. (15.3) 48.
Ciesielski, Krzysztof. 100th anniversary of the Jagiellonian University Students' Maths Society. (17.4) 42–46.
Ciesielski, Krzysztof, and Pogoda, Zdzisław. The beginning of Polish topology. (18.3) 32–39.
Cipra, Barry. Archimedes Andrew and the ball-bearing missile. (13.1) 44–48.
Clemens, Herb. Review of *Calculus From Graphical, Numerical, and Symbolic Points of View*, by Arnold Ostebee and Paul Zorn. (18.4) 67–69.
Cohen, Jack, and Stewart, Ian. The information in your hand. (13.3) 12–15.
Cohen, Marion. Two Poems. (19.1) 57.
Cohen, Marion. Changing the Topology of the House. (19.1) 67.
Cohen, Marion. Two Poems. (19.2) 52.
Coleman, A. John. The greatest mathematical paper of all time. (11.3) 29–38.
Collart, Stéphane. A new Heisenberg principle. (17.1) 3.
Colton, David. Review of *Partial Differential Equations I: Foundations of the Classical Theory, Encyclopedia of Mathematical Sciences*, Vol. 30, by Yu. V. Egorov and M.A. Shukin. (15.3) 69–71.
Colton, David. Review of *Linear and Boundary Integral Equations, Encyclopedia of Mathematical Sciences*, Vol. 27, by V.G. Maz'ya and S. Prössdorf. (15.3) 69–71.
Colton, David. Review of *An Introduction to the Mathematical Theory of Inverse Problems*, by Andreas Kirsch. (19.4) 72–75.
Conway, J.H., Hales, T.C., Muder, D.J., and Sloane, N.J.A. On the Kepler conjecture. (16.2) 5.
Corry, Leo. Hilbert on kinetic theory and radiation theory (1912–1914). (20.3) 52–58.
Cotlar, Mischa, and Recht, Lazaro. The burden of the grant system. (19.3) 5.
Coutinho, S.C. Review of *An Introduction to Coding and Information Theory*, by Steven Roman. (20.3) 65–67.
Cox, Steven J. The shape of the ideal column. (14.1) 16–24.
Cox, Steven. Steven Cox responds. (15.3) 68.
Coxeter, H.S.M. Symmetrical combinations of three or four hollow triangles. (16.3) 25–30.
Coxeter, H.S.M. Symmetrical combinations of triangles: postscript. (17.1) 4.
Coxeter, H.S.M. The trigonometry of Escher's woodcut "Circle Limit III." (18.4) 42–46.
Coxeter, H.S.M. Proposal for a workshop. (19.2) 36.
Coxeter, H.S.M. A shorter derivation. (19.3) 7.
Coxeter, H.S.M. Numerical distances among the spheres in a loxodromic sequence. (19.4) 41–47.
Crapo, Henry. Structural topology, or the fine art of discovery. (19.4) 27–35.
Crilly, Tony. Arthur Cayley: the road not taken. (20.4) 49–53.
Cromwell, Peter R. Celtic knotwork: mathematical art. (15.1) 36–47.
Cromwell, Peter. Borromean triangles in Viking art. (17.1) 3–4.
Cromwell, Peter R. The walrus and the Mandelbrot. (17.2) 40.
Cromwell, Peter R. Kepler's work on polyhedra. (17.3) 23–33.

Cromwell, Peter, Beltrami, Elizabetta, and Rampichini, Marta. The Borromean rings. (20.1) 53–62.
Cronin, Jane. Electrically active cells and singular perturbation theory. (12.4) 57–64.
Curtis, Charles W. Representation theory of finite groups: from Frobenius to Brauer. (14.4) 48–57.
Dale, A.I. Thomas Bayes: a memorial. (11.3) 18–19.
Dale, A.I. Too long for this margin. (16.1) 3.
Davis, Chandler. Metaphors for mathematicians. (14.1) 31.
Davis, Chandler. Which is to be master, that's all. (14.2) 51.
Davis, Chandler. Is there a number one? (14.3) 23.
Davis, Chandler. Criticisms of Shafarevich. (15.1) 3.
Davis, Chandler. Which is to be master—III. (15.2) 26.
Davis, Chandler. Succès de scandale. (15.4) 61.
Davis, Chandler. As others see us: responses. (16.3) 5.
Davis, Chandler. Which is to be master—IV. (18.2) 37.
Davis, Chandler. Remembering Olga Taussky Todd. (19.1) 15–17.
Davis, Chandler. Our own Babel. (19.2) 4.
Davis, Chandler. See Shepp, Lawrence A., Schuster, Seymour, Sadosky, Cora, Graham, Ronald L., Davis, Chandler, and Cho, Zang-Hee.
Davis, Michael. Righting the early history of computing, or how sausage was made. (16.4) 21–26.
Davis, Michael. Michael Davis responds. (16.4) 28.
Davis, Donald M. Review of *Memorabilia Mathematica: The Philomath's Quotation Book*, by Robert Edouard Moritz. (17.2) 69–70.
Davis, Donald M. Review of *Out of the Mouths of Mathematicians: a Quotation Book for Philomaths*, by Rosemary Schmalz. (17.2) 69–70.
Davis, Donald M. Review of The *Biographical Dictionary of Scientists*, 2nd edition, Consultant Editor, Roy Porter. (17.3) 73–75.
Davis, Martin. Review of *Abraham Robinson: the Creation of Nonstandard Analysis; a Personal and Mathematical Odyssey*, by Joseph Warren Dauben. (18.2) 75–77.
Davis, Philip J. Review of *Norbert Wiener, 1894–1964*, by Pesi R. Masani. (17.4) 73–75.
Davis, Philip J. Review of *Invention: The Care and Feeding of Ideas*, by Norbert Wiener (introduction by S.J. Heims). (17.4) 73–75.
Davitt, Richard M. William Marshall Bullitt and his amazing mathematical collection. (11.4) 26–33.
Dawson, John W. Jr. Public Image. (12.1) 13.
Dawson, John W. Jr. Poetry. (13.1) 6.
Demushkin, S.P. Defending Shafarevich. (15.1) 3.
den Hollander, Frank. Euler's tomb. (12.1) 49.
DeTurck, Dennis. Review of *Unsolved Problems in Geometry*, by H.T. Croft, K.J. Falconer, and R.K. Guy. (15.1) 71–72.
Devaney, Robert L. Film and video as a tool in mathematical research. (11.2) 33–38.
Devaney, Robert L. Review of *Introduction to the Modern Theory of Dynamical Systems*, by Anatole Katok and Boris Hasseblatt. (20.1) 77–78.
Devlin, Keith. Chaos. (11.3) 3.
Diacu, Florin N. Painlevé's conjecture. (15.2) 6–12.
Diacu, Florin. The solution of the *n*-body problem. (18.3) 66–70.
Diacu, Florin. Florin Diacu replies. (19.4) 2.
Dieks, Dennis. More about doom. (15.3) 4–5.
Dieudonné, J. Review of *Joseph Liouville 1809–1882, Master of Pure and Applied Mathematics (Studies in the History of Mathematics and Physical Sciences 15)*, by Jesper Lützen. (14.1) 71–73.
Dimitrić, Radoslav and Goldsmith, Brendan. Sir William Rowan Hamilton. (11.2) 29–30.
Dimitrić, Radoslav. Hamilton's Notebook. (12.1) 6.
Dimitrić, Radoslav. Sir Isaac Newton. (13.1) 61–65.
Dimitrić, Radoslav. Anatoly Ivanovich Maltsev. (14.2) 26–30.
Donnelly, Keith E. Poincaré, Einstein, Whittaker. (18.2) 4.
Dorfleitner, Gregor, and Klein, Thomas. Renaissance area-fillings in the city hall of Augsburg. (18.2) 48–51.
Dorwart, Harold L. Review of *Leonardo, Special Issue, Visual Mathematics*, guest editor Michele Emmer.
Døsen, K. One more reference on self-reference. (14.4) 4–5.
Døsen, K. Tortuous application. (20.1) 72.
Douglas, Ronald G. Chaos. (11.3) 3–4.
Drucker, Thomas. Review of Mathematical Visions: The Pursuit of Geometry in Victorian England, by Joan Richards. (14.2) 77–79.
Dubinsky, Ed, and Noss, Richard. Some kinds of computers for some kinds of learning: a reply to Koblitz. (18.1) 17–20.
Dudley, Underwood. Review of *A Century of Mathematics*, edited by John Ewing. (17.2) 73–74.
Duffin, R.J. The patron saint of mathematics. (15.1) 52.
Duren, Peter. In remembrance of Allen Shields. (12.2) 11–14.
Dyson, Freeman J. Wolf Prize. (11.4) 3.
Dyson, Freeman. Review of *Nature's Numbers*, by Ian Stewart. (19.2) 65–67.
Eckhardt, Williams. Prediction and the spiteful computer. (15.2) 3–4.
Edelman, Shimon. Review of *The Illusion of Reality*, by Howard Resnikoff. (15.4) 68–70.
Edelman, Shimon. Review of *The Geometry of Vision*, edited by Robert Melter, Azriel Rosenfeld, and Prabir Bhattacharya. (15.4) 68–70.
Edelman, Shimon. Review of *Visual Structures and Integrated Functions*, edited by Michael Arbib and Jörg-Peter Ewert. (15.4) 68–70.
Edgar, G.A. A fractal puzzle. (13.3) 44–50.
Edwards, Harold M. Mathematical ideas, ideals, and ideology. (14.2) 6–19.
Effros, Edward G. Why the circle is connected: an introduction to quantized topology. (11.1) 27–24.
Emmer, Michele. Review of *Symmetry: Unifying Human Understanding*, edited by István Hargittai. (12.4) 75–78.
Emmer, Michele. Review of *Symmetry Through the Eyes of a Chemist*, by István Hargittai and Magdolna Hargittai. (12.4) 75–78.
Emmer, Michele. Review of *Spirals: From Theodorus to Chaos*, by Philip J. Davis. (18.1) 75–78.
Epple, Moritz. Orbits of asteroids, a braid, and the first link invariant. (20.1) 45–52.
Everest, Graham. Measuring the height of a polynomial. (20.3) 9–16.
Falconer, Kenneth. Review of *Old and New Unsolved Problems in Plane Geometry and Number Theory*, by Victor Klee and Stan Wagon. (15.1) 72–75.
Farouki, Rida T. Computing with barycentric polynomials. (13.4) 61–69.
Fauntleroy, Amassa. Projective ranks of Hermitian symmetric spaces. (15.2) 27–32.
Fauvel, John, and Shenitzer, Abe. Review of *Mathematics and Its History*, by John Stillwell. (14.3) 69–73.
Fefferman, C.L., and Folland, G.B. The Final Oral Exam. (14.4) 31.
Fletcher, Peter. Proposed feature for Intelligencer. (16.2) 5.
Flood, Raymond, and Wilson, Robin. Irish mathematics. (18.3) 80.
Flood, Raymond, and Wilson, Robin. Chinese mathematics I. (20.1) 80.
Flood, Raymond, and Wilson, Robin. Chinese mathematics II. (20.2) 80.
Folland, G.B. See Fefferman, C.L., and Folland, G.B.
Folland, G.B., and Green, Mark L. The analyst. (14.4) 37.
Ford, Charles E. Dmitrii Egorov: mathematics and religion in Moscow. (13.2) 24–30.

Formanek, Edward. Polynomial identities and the Cayley-Hamilton theorem. (11.1) 37–39.
Foschini, Gerard J. Thoughts on Milnor. (20.4) 3.
Franklin, James. Ethics of mathematics. (13.1) 4.
Franks, John. Review of *Chaos: Making a New Science*, by James Gleick. (11.1) 65–69.
Franks, John. Comments on the responses to my review of Chaos. (11.3) 12–13.
Fraser, Craig G. Review of *A Source Book in Mathematics*, 1200–1800, by Dirk J. Struik. (11.4) 68–70.
Friedlander, Susan, and Powell, Anton. The mathematical Miller of Nottingham. (11.4) 38–40.
Fuchs, W.H.J., and Lorch, Lee. Review of *A Century of Mathematics in America*. 3 vols. Edited by Peter Duren, assisted by R.A. Askey, H.M. Edwards, and U.C. Merzbach.
Gaier, Dieter. Abraham Ezechiel Plessner (1900–1961): his work and his life. (14.3) 31–36.
Gale, David. The truth and nothing but the truth. (11.3) 62–67.
Gale, David. Proof as explanation. (12.1) 4.
Gale, David. (13.1) 40–43.
Gale, David. We all make mistakes. (13.2) 31–33.
Gale, David. Conjectures. (13.3) 53–55.
Gale, David. Somos sequence update. (13.4) 49–52.
Gale, David. (14.1) 54–57.
Gale, David. (14.2) 68–71.
Gale, David. More on protocols: playing games over the telephone. (14.3) 60–64.
Gale, David. Ideas. (14.4) 58–62.
Gale, David. Tiling of surfaces by unequal squares, etc. (15.1) 48–52.
Gale, David. The industrious ant, etc. (15.2) 54–58.
Gale, David. Games people play, etc. (15.3) 56–61.
Gale, David. Go. (16.2) 25–31.
Gale, David. More paradoxes. Knowledge games. (16.4) 38–44.
Gale, David. Triangles and computers. (17.1) 20–26.
Gale, David. Triangles and proofs. (18.1) 3.
Gale, David. Avoiding numbers, etc. (18.3) 23–27.
Gale, David. Problems and patterns, etc. (18.4) 29–34.
Gale, David. Euclid's last (or lost) theorem. (20.4) 32.
Gale, David, Propp, Jim, Sutherland, Scott, and Troubetzkoy, Serge. Further travels with my ant. (17.3) 48–56.
Gallian, Joseph A. Circuits in directed grids. (13.3) 40–43.
Gardner, Martin. Prediction paradox. (16.2) 3.
Gardner, Martin. Lucky numbers and 2187. (19.2) 26–29.
Gardner, R.J. The Banach-Tarski paradox. (11.2) 3.
Gauthier, Paul. Not a word. (18.1) 7.
Gautschi, Walter. Ostrowski and the Ostrowski Prize. (20.3) 32–34.
Gehring, F.W. Allen L. Shields. (12.2) 20.
Gelbrich, G., and Giesche, K. Fractal Escher salamanders and other animals. (20.2) 31–35.
Gerow, Ken, and Holbrook, John. Statistical sampling and fractal distributions. (18.1) 12–22.
Giblin, I. See Alexander, C. Giblin, I., and Newton, D.
Giesche, K. See Gelbrich, G., and Giesche, K.
Gillman, Leonard. Review of *Emblems of Mind: The Inner Life of Music and Mathematics*, by Edward Rothstein. (20.3) 60–64.
Gilmore, Paul C. Logic, sets, and mathematics. (15.1) 10–19.
Gilmore, Robert. Review of *The Interpretation of Quantum Mechanics*, by Roland Omnes. (18.1) 70–75.
Gilmore, Robert. Review of *Handbook of Lie Group Analysis of Differential Equations: Applications in Engineering and Physical Sciences*, edited by Nail H. Ibramigov. (19.1) 71–74.
Givant, Steven R. A portrait of Alfred Tarski. (13.3) 16–32.
Givant, Steven. Unifying threads in Alfred Tarski's work. (20.4)
Glass, A.M.W. Existence theorems in mathematics. (11.1) 56–62.
Glass, A.M.W. The ubiquity of free groups. (14.3) 54–57.
Glass, Leon. Review of *When Time Breaks Down: The Three-Dimensional Dynamics of Electrochemical Waves and Cardiac Arrhythmias*, by Arthur T. Winfree. (15.1) 67–70.
Glass, Leon. Review of *The Geometry of Biological Time*. (15.1) 67–70.
Gleick, James. James Gleick replies. (11.3) 8–9.
Göbel, Silke. What the Citation Index is good for. (19.3) 5–6.
Gold, Bonnie. What is the philosophy of mathematics, and what should it be? (16.3) 20–24.
Goldsmith, Brendan. See Dimitrić, Radoslav and Goldsmith, Brendan.
Goldstein, Daniel. Do we do mathematics with our visual brain? (20.4) 5–10.
Golomb, Solomon W. Tiling rectangles with polyominoes. (18.2) 38–47.
Goodman, Jacob E. Will Fermat last? (17.4) 6.
Gordon, Carolyn S. When you can't hear the shape of a manifold. (11.3) 39–47.
Götze, Heinz. Friedrich II and the love of geometry. (17.4) 48–57.
Götze, Heinz. Visit to Hua Loo-Keng. (18.1).
Grabiner, Judith Victor. Review of *A History of Mathematics: An Introduction*, by Victor J. Katz. (16.4) 73–76.
Graham, Ronald L. See Shepp, Lawrence A., Schuster, Seymour, Sadosky, Cora, Graham, Ronald L., Davis, Chandler, and Cho, Zang-Hee.
Grant, Hardy. What is modern about "modern" mathematics? (17.3) 62–66.
Gratton-Guinness, I. A residual category: some reflections on the history of mathematics and its status. (15.4) 4–6.
Gratton-Guinness, I. Review of *A Radical Approach to Real Analysis*, by David Bressoud. (17.4) 68–70.
Gray, Jeremy. Did Poincaré say "Set theory is a disease"? (13.1) 19–22.
Gray, Jeremy. Green and Green's functions. (16.1) 45–47.
Gray, Jeremy. Otto Hölder and Group Theory. (16.3) 59–61.
Gray, Jeremy. Eduard Čech. (16.4) 48–49.
Gray, Jeremy. Poincaré, Einstein, and the theory of special relativity. (17.1) 6568.
Gray, Jeremy. Arthur Cayley (1821–1895). (17.4) 62–63.
Gray, Jeremy J. Many-valued logics. (18.2) 23–25.
Gray, Jeremy J. Enriques and the popularisation of mathematics. (18.4) 51–54.
Gray, Jeremy. König, Hadamard and Kürschák, and abstract algebra. (19.2) 61–64.
Gray, Jeremy. Review of *The Problem of the Earth's Shape from Newton to Clairaut*, by John L. Greenberg. (19.1) 68–69.
Gray, Jeremy. Riemann's lecture courses on complex function theory. (19.4) 58–62.
Gray, Jeremy. The foundations of geometry and the history of geometry. (20.2) 54–59.
Gray, Mary W. Review of *Advanced Calculus of Murder*, by Erik Rosenthal. (12.1) 77–79.
Gray, Mary W. The Association for Women in Mathematics - a personal view. (13.4) 6–11.
Gray, Mary W. Review of *Arcadia*: a play by Tom Stoppard. (17.2) 67–68.
Gray, Robert. Computer programs and mathematical proofs. (13.4) 45–48.
Gray, S.I.B. A mathematics treasure in California. (20.2) 41–46.
Grayson, Matthew, Kitchens, Bruce, and Zettler, George. Visualizing toral automorphisms. (15.1) 63–66.
Griffiths, Graham W. Review of *Feynman's Lost Lecture*, by David L. Goodstein and Judith R. Goodstein. (20.3) 68–70.
Grothendieck, A. Grothendieck on prizes. (11.1) 34.
Gunther, Paul. Huygens's principle and Hadamard's conjecture. (13.2) 56–63.
Gustafson, Karl, and Abe, Takehisa. The third boundary condition—was it Robin's? (20.1) 63–70.

Gustafson, Karl, and Abe, Takehisa. (Victor) Gustave Robin: 1855–1897. (20.2) 47–53.
Guy, Richard K. Review of *Ramsey Theory*, by Ronald L. Graham, Bruce L. Rothschild, and Joel H. Spencer. (15.1) 70–71.
Haber, Seymour. The axiom of choice and calculus revision: a dialogue. (13.2) 20–23.
Hales, Thomas C. The status of the Kepler conjecture. (16.3) 47–58.
Hales, T.C. See Conway, J.H., Hales, T.C., Muder, D.J. and Sloane, N.J.A.
Halton, John H. The shoelace problem. (17.4) 36–41.
Hämmerlin, Günther. A portrait of Brook Taylor in North Yorkshire. (20.3) 42.
Hanley, Paul. In the public eye. (17.4) 57.
Hanlon, Phil. Order and disorder in algebraic combinatorics. (14.2) 20–25.
Hannabuss, Keith. Forgotten fractals. (18.3) 28–31.
Hannabuss, Keith. Sound and symmetry. (19.4) 16–20.
Hannabuss, Keith, and Wilson, Robin. Mathematical physics I. (17.3) 76.
Hannabuss, Keith, and Wilson, Robin. Mathematical physics II. 17.4) 78.
Hannabuss, Keith, and Wilson, Robin. Mathematical physics III. (18.1) 80.
Hansen, Staffan. Anthropomorphic origin of Platonic solids? (19.1) 4.
Hansen, Vagn Lundsgaard. Jakob Nielsen (1890–1959). (15.4) 44–53.
Hansen, Vagn Lundsgaard. The story of a shopping bag. (19.2) 50–52.
Hargittai, István. Quasicrystal sculpture in Bad Ragaz. (14.3) 58–59.
Hargittai, István. Imperial cuboctahedron. (15.1) 58–59.
Hargittai, István. Pentagonal decoration in Granada. (15.2) 46–49.
Hargittai, István. Octagons abound. (17.2) 52–54.
Hargittai, István. Fullerene geometry under the lion's paw. (17.3) 34–36.
Hargittai, István. Sacred star polyhedron. (18.3) 52–54.
Hargittai, István. Lifelong symmetry: a conversation with H.S.M. Coxeter. (18.4) 35–41.
Hargittai, István. A great communicator of mathematics and other games: A conversation with Martin Gardner. (19.4) 36–40.
Hargittai, István and Hargittai, Magdolna. Symmetry of opposites: antisymmetry. (16.2) 60–66.
Hargittai, István, and Hargittai, Magdolna, One-dimensional space groups. (18.2) 78–79.
Hargittai, István, and Vilkov, Lev V., Moscow Möbius. (19.3) 41–42.
Hargittai, István. See Hargittai, Magdolna, and Hargittai, István.
Hargittai, Magdolna, and Hargittai, István. Symmetry and perception: logos of rotational point-groups induce the feeling of motion (19.3) 55–58.
Hargittai, Magdolna. See Hargittai, István, and Hargittai, Magdolna.
Harkleroad, Leon. See Morris, Edie, and Harkleroad, Leon.
Harris, Michael. Shafarevich furor. (15.1) 4.
Hartley, Stephen J. Review of *Genetic Algorithms + Data Structures = Evolution Programs*, by Zbigniew Michalewicz. (18.3) 75–76.
Hawkins, Thomas. The birth of Lie's theory of groups. (16.2) 6–17.
Heatherly, Henry. Kramers's thesis advisor? (11.3) 4.
Heatherly, Henry. First statistical laboratory. (12.4) 4.
Helgason, Sigurdur. A centennial: Wilhelm Killing and the exceptional groups. (12.3) 54–57.
Helmberg, Gilbert, and Sigmund, Karl. Nestor of mathematicians: Leopold Vietoris turns 105. (18.40 47–50.
Henle, J.M. The happy formalist. (13.1) 12–18.
Henle, J.M. Jim Henle replies. (14.1) 8.
Henriksen, Melvin. There are too many B.A.D. mathematicians. (15.1) 6–9.
Hermann, Robert. Fractal theory. (13.1) 4–6.
Hersh, Reuben. Mathematics and ethics. (12.3) 12–15.
Hersh, Reuben. Review of *Sets, Numbers and Universes*, by Stanislaw Ulam. (14.4) 71–73.
Hersh, Reuben. Review of *Science, Computers, and People. From The Tree of Mathematics*, by Stanislaw Ulam. (14.4) 71–73.
Hersh, Reuben. Review of *Analogies Between Analogies. The Mathematical Reports of S.M. Ulam and His Los Angeles Collaborators*, edited by Al Bednarek and Françoise Ulam. (14.4) 71–73.
Hersh, Reuben, and John-Steiner, Vera. A visit to Hungarian mathematics. (15.2) 13–26.
Hersh, Reuben. Reuben Hersh responds. (15.3) 7.
Hersh, Reuben. Freud on math. (17.4) 47.
Hersh, Reuben. How to do and write math research. (19.2) 58–60.
Hewitt, Edwin. So far, so good: my life up to now. (12.3) 58–63.
Hildebrandt, Stefan. The calculus of variations today (translated by A. Shenitzer). (11.4) 50–60.
Heyerhoff, Markus. Sine-Gordon equation. (17.3) 4 and 66.
Hilton, Peter. Working with Alan Turing. (13.4) 22–25.
Hilton, Peter. Review of *A Basic Course in Algebraic Topology*, by William Massey. (15.4) 62–64.
Hilton, Peter, and James, Ioan. The Whitehead Heritage. (19.1) 58–63.
Hilton, Peter, and Pedersen, Jean. Catalan numbers, their generalizations, and their uses. (13.2) 64–75.
Hilton, Peter, and Pedersen, Jean. Catalan numbers. (15.1) 4–5.
Hinz, Andreas M. Laplace in Calvados. (16.2) 56–59.
Hiriart-Urruty, J.-B. Historical associations of Fermat in Beaumont and Toulouse, France. (12.2) 52–53.
Hirsch, Morris W. Chaos, rigor, and hype. (11.3) 6–8.
Hirzebruch, Friedrich. One hundred years of the Deutsche Mathematiker-Vereinigung. (13.2) 8–11.
Hlawka, Edmund, Renewal of the Doctorate of Olga Taussky Todd. (19.1) 18–20.
Hoenig, Alan. Review of *Mathematica, A Program for Various Work Stations and Personal Computers*, by Wolfram Research. (12.2) 69–74.
Hoenig, Alan. Review of Mathematica: *A System for Doing Mathematics By Computer*, by Stephan Wolfram. (12.2) 69–74.
Holbrook, John. See Gerow, Ken, and Holbrook, John.
Holbrook, John. Review of *Space-Filling Curves*, by Hans Sagan. (19.1) 69–71.
Holden, Jonathan. Comments on the poetry of Wallace Stevens. (12.1) 77.
Holden, Jonathan. The fall of Pythagoras. (12.3) 53.
Holzapfel, R.-P. A voyage with three balloons. (12.1) 33–39.
Hoover, William G. Prediction and the spiteful computer. (15.2) 4.
Horowitz, David. The English hammer-beam roof. (18.4) 61–63.
Hoste, Jim, Thistlethwaite, Morwen, and Weeks, Jeff. The first 1,701,936 knots. (20.4) 33–48.
Hsiang, Wu-Yi. A rejoinder to Hales's article. (17.1) 35–42.
Hu, Kuo-Kuang. See Kirmser, Philip G., and Hu, Kuo-Kuang.
Huber-Dyson, Verena. A euphemism? (17.1) 3
Hudson, R.L. Green's grave. (11.4) 40.
Huneke, Craig. An algebraist commuting in Berkeley. (11.1) 40–52.
Huylebrouck, D. Captain Magin-Bocquet's contribution to mathematics. (16.1) 8–9.
Huylebrouck, Dirk. Snellius's memorial stone. (17.4) 58–59.
Huylebrouck, Dirk. Van Ceulen's tombstone. (17.4) 60–61.
Huylebrouck, Dirk. The π-room in Paris. (18.2) 51–53.
Huylebrouck, Dirk. Simon Stevin's statue. (18.3) 55–56.
Huylebrouck, Dirk. The bone that began the space odyssey. (18.4) 56–60.
Ibragimov, Nail H. Sophus Lie and harmony in mathematical physics, on the 150th anniversary of his birth. (16.1) 20–28.

Isaacs, I.M. The impossible problem revisited again. (17.4) 4–6.
Isbell, John. More about doom. (15.3) 3.
Itenberg, Ilia, and Viro, Oleg. Patchworking algebraic curves disproves the Ragsdale conjecture. (18.4) 19–28.
Jagy, William C. Squaring circles in the hyperbolic plane. (17.2) 31–36.
Jaffard, Stéphane, see Mandelbrot, Benoit, and Jaffard, Stéphane.
James, Ioan. Reminiscences of a topologist. (12.1) 50–55.
James, Ioan. Organizing a conference. (13.1) 49–51.
James, Ioan. See Hilton, Peter, and James, Ioan.
John-Steiner, Vera. See Hersh, Reuben, and John-Steiner, Vera.
Jones, William B. Review of *History of Continued Fractions and Padé Approximants*, by Claude Brezinski. (15.3) 71–73.
Kadanoff, Leo P. Fractals. (12.1) 3–4.
Kahane, Jean-Pierre. Jacques Hadamard. (13.1) 23–29.
Kantor, Jean-Michel. Hilbert's problems and their sequels. (18.1) 21–30.
Kari, Lila. DNA computing: arrival of biological mathematics. (19.2) 9–22.
Kawohl, Bernd. Symmetry or not? (20.2) 16–22.
Kawohl, Bernhard. See Buttazzo, Guiseppe, and Kawohl, Bernhard.
Keen, Linda. Hyperbolic geometry and spaces of Riemann surfaces. (16.3) 11–19.
Kellerhals, Ruth. Shape and size through hyperbolic eyes. (17.2) 21–30.
Kilgour, Marc. Review of *Theory of Moves*, by Steven J. Brams. (19.3) 68–70.
Kilgour, Marc. Review of *Game Theory and Strategy*, by Philip D. Straffin. (19.3) 68–70.
King, Jonathan L. Billiards inside a cusp. (17.1) 8–16.
Kirchherr, Walter, Li, Ming, and Vitanyi, Paul. The Miraculous Universal Distribution. (19.4) 7–15.
Kirmser, Philip G., and Hu, Kuo-Kuang. The shape of the ideal column reconsidered. (15.3) 62–67.
Kjellberg, Bo. Memories of Arne Beurling, February 3, 1905–November 20, 1986. (15.3) 28–31.
Klaassen, Bernhard. Explaining the number 1240. (14.2) 4–5.
Klein, Thomas. See Dorfleitner, Gregor, and Klein, Thomas.
Kleiner, Israel. Review of *Abstract Algebra and Famous Impossibilities*, by A. Jones, S.A. Morris, and K.R. Pearson. (15.3) 73–75.
Kleiner, Israel, and Movshovitz-Hadar, Nitsa. Proof: a many-splendored thing. (19.3) 16–17.
Klotz, Irving M. Number mysticism in scientific thinking. (17.1) 43–51.
Knox, John A. See Brothers, Harlan J., and Knox, John A.
Koblitz, Neal. Neal Koblitz replies. (11.1) 4.
Koblitz, Neal. Recollections of mathematics in a country under siege. (12.3) 16–34.
Koblitz, Neal. Review of *Women and Mathematics: Balancing The Equation*, edited by Susan F. Chipman, Lorelei R. Brush, and Donna M. Wilson. (13.1) 77–78.
Koblitz, Neal. The case against computers in K-13 math education (kindergarten through calculus). (18.1) 9–16.
König, Heinz. The missing past of the not-so-missing link. (19.3) 7.
Kosmann-Schwarzbach, Yvette. Spinning Tops. (20.4) 65.
Krantz, Steven G. Fractal geometry. (11.4) 12–16.
Krantz, Steven G. Steven Krantz replies. (11.4) 19.
Krantz, Steven G. Mathematical anecdotes. (12.4) 32–38.
Krantz, Steven G. Glossary of common math terms. (16.1) 36.
Kuijlaars, A.B.J. See Saff, E.B., and Kuijlaars, A.B.J.
Kullman, David E. Penrose tiling at Miami University. (18.4) 66.
Kuo, K.H. Penrose tiling in Helsinki and Tokyo. (18.4) 65.
Kustin, Kathleen E. 'Twas the night before the topology final. (12.1) 13.
Lagarias, Jeffrey C., and Richardson, Thomas J., Multivariate Descartes Rule of Signs and Sturmfels's challenge problem. (19.3) 9–15.
Lam, C.W.H. How reliable is a computer-based proof? (12.1) 8–12.
Lambek, J. Are the traditional philosophies of mathematics really incompatible? (16.1) 56–62.
Lambek, J. If Hamilton had prevailed: quaternions in physics. (17.4) 7–15.
Lambek, J. Corrigenda to "Quaternions in physics." (18.3) 3.
Lambek, J. Number words and language origins. (18.4) 69–72.
Landau, Susan. How to tangle with a nested radical. (16.2) 49–55.
Landau, Susan. $\sqrt{2} + \sqrt{3}$: four different views. (20.4) 55–60.
Lau, Eike, and Schleicher, Dierk. Symmetries of fractals revisited. (18.1) 45–51.
Laubenbacher, Reinhard, and Pengelley, David. Gauss, Eisenstein, and the "third" proof of the quadratic reciprocity theorem: ein kleines Schauspiel. (16.2) 67–72.
Laugwitz, Annette, and Laugwitz, Detlef. Impressions from Riemann's native country. (17.3) 37–40.
Laugwitz, Detlef. See Laugwitz, Annette, and Laugwitz, Detlef.
Lawlor, Gary. A new area-maximization proof for the circle. (20.1) 29–31.
LeChevalier, Bob. Another international language. (11.4) 5.
Lehning, Herve. The birth of Galois and the death of Condorcet. (13.3) 66–67.
Lehto, Olli. On the life and work of Lars Ahlfors. (20.3) 4–8.
Lenard, Andrew. Complex numbers. (11.4) 3–4.
Lenz, Hanfried. Wrong decade. (13.3) 5.
Lerma, Miguel A. Prediction and the spiteful computer. (15.2) 4.
Leslie, John. The Doomsday argument. (14.2) 48–51.
Leslie, John. John Leslie replies. (15.3) 5–7.
Levinson, Robert. Review of *Computers, Chess, and Cognition*, edited by T. Anthony Marsland and Jonathan Schaeffer. (15.2) 67–71.
Lévy-Leblond, Jean-Marc. If Fourier had known Argand . . . a geometrical point of view on Fourier transforms. (19.4) 63–71.
Lew, John S. Mathematics in poems. (12.3) 5.
Li, Ming. See Kirchherr, Walter, Li, Ming, and Vitanyi, Paul.
Linfoot, Joyce. A brief collaboration: Hans Heilbronn and E.H. Linfoot, 1933–1935. (15.3) 39–43.
Lipschutz, Robert J. How mathematicians do it. (13.3) 55.
Lipschutz-Yevick, Miriam. Identifying the S.F. (20.1) 12.
Lo Bello, Anthony. Descartes and the philosophy of mathematics. (13.3) 35–39.
Lorch, Lee. Review of *The Pólya Picture Album: Encounters of A Mathematician*, by George Pólya, edited by G.L. Alexanderson. (11.2) 70–71.
Lorch, Lee. See Fuchs, W.H.J.
Lorimer, Peter. Towards a 3-dimensional model of the 120-cell. (11.3) 61.
Loxton, J.H. Review of *A Course in Number Theory and Cryptography*, by Neal Koblitz. (15.2) 63–67.
Luchins, Abraham S. and Luchins, Edith H. The Einstein-Wertheimer correspondence on geometric proofs and mathematical puzzles. (12.2) 35–43.
Luchins, Edith H. See Luchins, Abraham S. and Luchins, Edith H.
Machado, Armando. Nineteen problems on elementary geometry. (17.1) 17–19.
Machover, Maurice. Epitaphs of famous mathematicians. (18.4) 6.
Mac Lane, Saunders. Paradise lost: the troubled government support of science. (11.2) 10–15.
Mac Lane, Saunders. Jobs in the 1930s and the views of George D. Birkhoff. (16.3) 9–10.
Mac Lane, Saunders. Will Fermat last? (16.3) 65.
Mac Lane, Saunders. See Birkhoff, Garrett, and Mac Lane, Saunders.
Malet, Antoni. Ferran Sunyer i Balaguer (1912–1967) and Spanish mathematics after the Civil War. (20.2) 23–30.
Malito, John. Review of *Nature's*

Numbers, by Ian Stewart. (19.1) 75–76.
Mandelbrot, Benoit B. Chaos, Bourbaki, and Poincaré. (11.3) 10–12.
Mandelbrot, Benoit B. Some "facts" that evaporate upon examination. (11.4) 17–19.
Mandelbrot, Benoit, and Jaffard, Stéphane. Peano-Pólya Motions, when time is intrinsic or binomial (uniform or multifractal). (19.4) 21–26.
Manin, Yu. I. Strings. (11.2) 59–65.
Marden, Albert. Fractals. (12.3) 4–5.
Martzloff, Jean-Claude. Li Shanlan (1811–1882) and Chinese traditional mathematics. (14.4) 32–37.
Mathias, A.R.D. The ignorance of Bourbaki. (14.3) 4–13.
Matijasevich, Yuri. My collaboration with Julia Robinson. (14.4) 38–45.
May, J. Peter. Memorial address for J. Frank Adams. (12.1) 40–44.
May, J. Peter. Reminiscences on the life and mathematics of J. Frank Adams. (12.1) 45–48.
McCarthy, John. Catalan numbers. (14.2) 5.
McCleary, John. Review of *A History of Non-Euclidean Geometry*, by B.A. Rosenfeld. (14.3) 73–75.
McGrath, James H. Quantum theory and the lattice join. (13.3) 72–79.
McLachlan, Robert. A gallery of constant-negative-curvature surfaces. (16.4) 31–37.
McLeay, Heather. A closer look at the cast ironwork of Australia. (16.4) 61–65.
Mehrtens, H. The Gleichschaltung of mathematical societies in Nazi Germany. (11.3) 48–60.
Melter, Robert A. See Rosenfeld, Azriel, and Melter, Robert A.
Meyerhoff, Robert. Geometric invariants for 3-manifolds. (14.1) 37–53.
Milligan, Lloyd, and Yarnall, Kenneth. Review of *The World's Most Famous Math Problem*, by Marilyn vos Savant. (16.3) 66–69.
Mills, T.M. Review of *Exact Constants in Approximation Theory*, by N. Korneichuk. (16.1) 68–70.
Milnor, John. A Nobel Prize for John Nash. (17.3) 11–17.
Milnor, John. Fubini foiled: Katok's paradoxical example in measure theory. (19.2) 30–32.
Mitchell, Evelyn. Review of *Bayes or Bust?: A Critical Examination of Bayesian Confirmation Theory*, by John Earman. (16.4) 66–68.
Miyazaki, Koji. The cuboctahedron in the past of Japan. (15.3) 54–55.
Mizzi, Eddie, see Seltman, Muriel, and Mizzi, Eddie.
Möhring, Willi. Hilbert's 18th problem and the Göttingen Town Library. (20.3) 43–44.
Moishezon, Boris. I.R. Shafarevich's Essay "On Russophobia". (14.1) 61–62.
Monk, J. Donald. Review of *The Joy of Sets*, by Keith Devlin. (17.2) 71–73.
Monna, A.F. Oswald Veblen. (16.1) 50–51.
Mooney, John. Colin Maclaurin and Glendaruel. (16.1) 48–49.
Moore, Gregory. Sixty years after Gödel. (13.3) 6–11.
Moore, Gregory. Recognizing finiteness. (14.2) 5.
Morain, François. See Shallit, Jeffrey, Williams, Hugh C., and Morain, François.
Morawetz, Cathleen S. Review of *Mathematics and The Unexpected*, by Ivar Ekeland. (13.3) 81–83.
Morawetz, Cathleen S. Review of *The Problems of Mathematics*, by Ian Stewart. (13.3) 81–83.
Morgan, Frank. Minimal surfaces, crystals, shortest networks, and undergraduate research. (14.3) 37–44.
Morris, Edie, and Harkleroad, Leon. Rósza Péter: recursive function theory's founding mother. (12.1) 59–61.
Moss, Larry. See Barwise, Jon, and Moss, Larry.
Movshovitz-Hadar, Nitsa. See Kleiner, Israel, and Movshovitz-Hadar, Nitsa.
Muder, D.J. See Conway, J.H., Hales, T.C., Muder, D.J. and Sloane, N.J.A.
Mühlhausen, Elisabeth. Riemann surface—crocheted in four colors. (15.3) 49–53.
Mühlhausen, Elisabeth. A walk around Liebniz. (18.1) 52–56.
Mullen, Gary L. A candidate for the "next Fermat problem." (17.3) 18–22.
Murty, V. Kumar. Ramanujan and Harish-Chandra. (15.2) 33–39.
Musès, Charles. Number magic explained. (17.3) 66.
Musès, Charles. Interlaced? (20.3) 3.
Musès, Charles. De Morgan's Ramanujan: an incident in recovering our endangered cultural memory of mathematics. (20.3) 47–51.
Nelson, Edward. Taking formalism seriously. (15.3) 8–11.
Neuberger, J.W. Beurling's analyticity theorem. (15.3) 34–38.
Neuenschwander, E. Documenting Riemann's impact on the theory of complex functions. (20.3) 19–26.
Nevai, Paul. See Askey, Richard, and Nevai, Paul.
Nevai, Paul. Infinity: can you believe it? (20.4) 3.
Newman, Donald J. Thought less mathematics. (15.4) 58–61.
Newman, D.J. The Morley Miracle. (18.1) 31–34.
Newton, D. See Alexander, C. Giblin, I., and Newton, D.
Nonnenmacher, Dirk J.F., Nonnenmacher, Theo F., and Zweifel, P.F. Kepler, Einstein, and Ulm. (15.2) 50–51.
Nonnenmacher, Theo F. See Nonnenmacher, Dirk J.F., Nonnenmacher, Theo F., and Zweifel, P.F.
Noss, Richard. See Dubinsky, Ed and Noss, Richard.
Novikov, S.P. Integrability in mathematics and theoretical physics: solitons. (14.4) 13–21.
Nyikos, Peter J. Formal systems. (13.3) 4–5.
Octavio, Alfredo. Report on the Zurich Congress. (18.3) 3.
Octavio, Alfredo. The "indexed" theorem. (18.4) 9–11.
Osherow, Jacqueline. From "London, Before and After: The Middle Way." (19.3) 38.
Osserman, Robert. Review of *Descartes' Dream: The World According to Mathematics*, by Philip J. Davis and Reuben Hersh. (11.2) 66–70.
Pach, János. Two places at once: a remembrance of Paul Erdős. (19.2) 38–39.
Palmeira, F. and Shubin, M.A. Pavel Samuilovic Urysohn. (12.4) 39.
Pambuccian, Victor. Intuitionism and celestial mechanics. (19.4) 5–6.
Paris, Alan. A letter to J.M. Henle, the "happy formalist." (14.1) 6–8.
Park, Robert L. The Copernican principle. (16.1) 4.
Park, Robert L. The Copernican principle and the rise of alternative science. (16.4) 44.
Parshall, Karen V.H. A century-old snapshot of American mathematics. (12.3) 7–11.
Parshall, Karen V.H. The one-hundredth anniversary of the death of invariant theory? (12.4) 10–16.
Parshall, Karen V.H. A study in group theory: Leonard Eugene Dickson's *Linear Groups*. (13.1) 7–11.
Parshall, Karen V.H. The 100th anniversary of mathematics at the University of Chicago. (14.2) 39–44.
Parshall, Karen V.H., and Rowe, David E. Embedded in the culture: mathematics at the world's Columbian exposition of 1893. (15.2) 40–45.
Parshall, Karen Hunger. To belong: the role of community in the life and work of J.J. Sylvester. (20.3) 35–39.
Patton, Peter C. Review of *John von Neumann and the Origins of Modern Computing*, by William Aspray. (16.4) 72–73.
Pedersen, Jean. See Hilton, Peter, and Pedersen, Jean.
Pedersen, Jean. Seeing the idea. (20.4) 6.
Pekonen, Osmo. When the owl is hooting, or, a mathematical ghost story. (13.4) 19–21.
Pekonen, Osmo. The heavenly spheres revisited. (15.4) 22–26.
Pekonen, Osmo. Bourbaki quoted in a book of mathematics in 1918. (16.1) 3–4.
Pekonen, Osmo. Which mathematical societies are the oldest? (17.2) 3.
Pengelley, David. See Laubenbacher, Reinhard, and Pengelley, David.

Perlstadt, Marci. Review of *She Does Math!: Real-Life Problems from Women on the Job*, by Marla Parker (ed.). (19.2) 69–71.
Pesin, Ya. B. Review of Billiards, *A Genetic Introduction to the Dynamics of Systems with Impacts*, by Valerii V. Kozlov and Dmitrii V. Treshchev. (18.3) 74–75.
Pesin, Ya. B. Review of *Invariant Manifolds; Entropy and Billiards; Smooth Maps with Singularities*, by Anatole Katok and Jean-Marie Strelcyn. (18.3) 74–75.
Péter, Rózsa. (translated by Leon Harkleroad). Mathematics is beautiful. (12.1) 58–64.
Peterson, Mark A. The Geometry of Piero della Francesca. (19.3) 33–40.
Peterson, S.Γ. Unintended consequences. (18.4) 6.
Phillips, Ralph. Reminiscences about the 1930s. (16.3). 6–8.
Pinkham, George. Review of *The Art of Doing Science and Engineering; Learning to Learn*, by Richard W. Hamming. (20.3) 67–68.
Piranian, George. Tentative affiliations: an apology. (12.2) 32–34.
Pisanski, Tomaz and Wilson, Robin. Jurig Vega—Slovenian mathematician. (17.2) 76.
Plouffe, S., see Bailey, D.H., Borwein, J., Borwein, P.B., and Plouffe, S.
Powell, Anton. See Friedlander, Susan, and Powell, Anton.
Priestley, W.M. Mathematics and poetry: how wide the gap? (12.1) 14–19.
Priestley, W.M. W.M. Priestley Replies. (12.3) 6.
Propp, Jim. Further Ant-ics. (16.1) 37–44.
Propp, Jim. See Gale, David, Propp, Jim, Sutherland, Scott, and Troubetzkoy, Serge.
Protter, Murray H. Calculus reform. (12.4) 6–9.
Pulte, Helmut. After 150 Years: News from Jacobi about Lagrange's Analytical Mechanics. (19.3) 48–53.
Quinn, Frank, and Ranicki, Andrew. Some history of the Hauptvermutung. (19.4) 5–6.
Ranicki, Andrew. See Quinn, Frank, and Ranicki, Andrew.
Rankin, Robert A. More on Maclaurin. (18.2) 5.
Rathbun, Ethel. Recollections of Allen L. Shields. (12.2) 21–22.
Recht, Lazaro. See Cotlar, Mischa, and Recht, Lazaro.
Reid, Constance. Eric Temple Bell. (11.1) 4.
Reingold, Edward M. A modest proposal. (17.3) 3.
Remmert, Reinhold. The Riemann-file Nr. 135 of the Philosophische Facultät of the Georgia Augusta at Göttingen. (15.3) 44–48.
Remmert, Reinhold. Complex analysis in "Sturm und Drang". (17.2) 4–11.
Richardson, Thomas J., see Lagarias, Jeffrey C., and Richardson, Thomas J.
Rice, Adrian. Augustus De Morgan (1806–1871). (18.3) 40–43.
Rigby, John F. Precise colourings of regular triangular tilings. (20.1) 4–11.
Riskin, Adrian. The mathematician's vacation. (14.3) 13.
Riskin, Adrian. Copyrights and wrongs. (16.1) 6–7.
Riskin, Adrian. Review of *Norbert Wiener, 1894–1964*, by Pesi R. Masani. (17.4) 7577.
Robbins, David P. The story of 1, 2, 7, 42, 429, 7436. (13.2) 12–19.
Roitman, Judith. The uses of set theory. (14.1) 63–69.
Rosenfeld, Azriel, and Melter, Robert A. Digital geometry. (11.3) 69–72.
Rota, Gian-Carlo. Light shadows: remembrances of Yale in the early fifties. (18.3) 44–51.
Rota, Gian-Carlo. Geometric probability. (20.4) 11–16.
Rothman, James. See Rothman, Patricia, and Rothman, James.
Rothman, Patricia, and Rothman, James. Festina Lente. (20.3) 17–18.
Rowe, David E. Interview with Dirk Jan Struik. (11.1) 14–26.
Rowe, David E. Review of *Ein Jahrhundert Mathematik, 1890–1990: Festschrift zum Jubilaum der DMV*, edited by Gerd Fischer, Friedrich Hirzebruch, Winfried Scharlau, and Willi Tornig. (13.4) 70–78.
Rowe, David E. See Parshall, Karen V.H., and Rowe, David E.
Rudin, Walter. ICM 90. (13.2) 6–7.
Rudolph, Lee. Frobenius: a sesquilogue. (18.2) 68–70.
Ruskai, Mary Beth. Review of *Wavelets: Algorithms and Applications*, by Y. Meyer. (17.4) 70–73.
Russ, Steve. Bolzano's analytic programme. (14.3) 45–53.
Sabatier, Pierre. Review of *Inverse Acoustic and Electromagnetic Scattering Theory*, by D. Colton and R. Kress. (16.2) 73–75.
Sadosky, Cora. See Shepp, Lawrence A., Schuster, Seymour, Sadosky, Cora, Graham, Ronald L., Davis, Chandler, and Cho, Zang-Hee.
Saff, E.B., and Kuijlaars, A.B.J., Distributing many points on a sphere. (19.1) 5–11.
Sagan, Hans. A geometrization of Lebesgue's space-filling curve. (15.4) 37–43.
Sallows, Lee C.F. A curious new result in switching theory. (12.1) 21–32.
Sallows, Lee C.F. New pathways in serial isogons. (14.2) 55–67.
Sallows, Lee. The impossible problem. (17.1) 27–33.
Sallows, Lee. Lee Sallows responds. (17.4) 6.
Sallows, Lee. The Lost Theorem. (19.4) 51–54.
Sarason, Donald. The exact answer to a question of Shields. (12.1) 18–19.
Saunders, Judith. Mathematicians at work. (15.3) 38.
Saunders, Judith. The Königsberg Bridge poem. (19.4) 20.
Scarpellini, Bruno. The foundations of mathematics. (11.1) 3.
Schapira, Pierre. Defense of the conceptual. (19.2) 7–8.
Schappacher, Norbert. Edmund Landau's Gottingen: from the life and death of a great mathematical center. (13.4) 12–18.
Schappacher, Norbert, and Schoof, René. Beppo Levi and the arithmetic of elliptic curves. (18.1) 57–69.
Schechter, Eric. Review of *Solving the Quintic* (educational poster), by Wolfram Research, Inc. (17.3) 71–73.
Schleicher, Dierk. See Lau, Eike, and Schleicher, Dierk.
Schnabel, Dan. Review of *Pi: A Source Book*, by Lennert Berggren, Jonathan Borwein, and Peter Borwein. (20.3) 64–65.
Scholz, Erhard. How to write about Teichmüller. (18.1) 5–6.
Schoof, René. See Schappacher, Norbert, and Schoof, René.
Schrage, George. More about doom. (15.3) 3–4.
Schroeder, Manfred. Review of *Searching for Uncertainty: What Scientists Can Know about the Future*, by John L. Casti. (16.3) 72.
Schroeder, Manfred. How probable is Fermat's last theorem? (16.4) 19–20.
Schroeder, Manfred. More on Magnus. (18.1) 7.
Schubert, Klaus. An international language for mathematics. (11.4) 4.
Schubring, Gert. Dirichlet. (12.1) 5–6.
Schuster, Seymour. See Shepp, Lawrence A., Schuster, Seymour, Sadosky, Cora, Graham, Ronald L., Davis, Chandler, and Cho, Zang-Hee.
Schwartz, Art. Review of *Plane Algebraic Curves*, by Egbert Brieskorn and Horst Knorrer. (12.2) 74–78.
Schwartz, Art. Review of *Computational Geometry for Design and Manufacture*, by I.D. Faux and M.J. Pratt. (12.2) 74–78.
Schwartz, Art. Review of *The Mathematics of Surfaces*, edited by J.A. Gregory. (12.2) 74–78.
Schwartz, Art. Review of *The Mathematical Description of Shape and Form*, by E.A. Lord and C.B. Wilson. (12.2) 74–78.
Schweigman, C., and Zhang, S. The teachings of Hua Loo-Keng: a challenge today? (16.3) 36–46.
Scimone, Aldo. Il circolo matematico di Palermo. (18.1) 6.

Seeman, Nadrian C. DNA Borromean rings. (20.3) 3.
Seiken, Arnold. A double dactylic overview of French mathematics: sublime and other. (17.2) 11.
Seltman, Muriel, and Mizzi, Eddie, Thomas Harriott: Father of English algebra? (19.1) 46–49.
Senechal, Marjorie. Review of *The Emperor's New Mind: Concerning Computers, Minds and the Laws of Physics*, by Roger Penrose. (14.2) 72–77.
Senechal, Marjorie. Review of *Visions of Symmetry: Notebooks, Periodic Drawings, and Related Work of M.C. Escher*, by Doris Schattschneider. (14.2) 72–77.
Senechal, Marjorie. New column on the way. (18.4) 5.
Senechal, Marjorie. Two communities and vertical integration. (19.2) 33–37.
Senechal, Marjorie. The continuing silence of Bourbaki—an interview with Pierre Cartier, June 18, 1997. (20.1) 22–28.
Senechal, Marjorie. Oberwolfach, 1944–1964. (20.4) 17–24.
Senechal, Marjorie and Taylor, Jean. Quasicrystals: the view from Les Houches. (12.2) 54–64.
Shafarevich, I.R. Abelian and nonabelian mathematics. (13.1) 67–75.
Shallit, Jeffrey. Dating the cryptic bone. (3) 7.
Shallit, Jeffrey, Williams, Hugh C., and Morain, François. Discovery of a lost factoring machine. (17.3) 41–47.
Shapiro, Harold S. Allen Lowell Shields: some reminiscences. (12.2) 8–10.
Shapiro, Helene, Notes from Math 223: Olga Taussky Todd's matrix theory course, 1976–1977. (19.1) 21–27.
Shapiro, Joel H. On being Allen's student. (12.2) 15–17.
Shen, A. Entrance examinations to the Mekh-mat. (16.4) 6–10.
Shen, Alexander, Mathematical Entertainments (19.1) 12–14.
Shen, Alexander, Three-dimensional solutions for two-dimensional problems. (19.3) 44–47.
Shen, Alexander, Mathematical Entertainments (19.4) 48–50.
Shen, Alexander. Geometry problems revisited, etc. (20.2) 36–40.
Shen, Alexander. Probabilistic proofs. (20.3) 29–31.
Shen, Alexander. Two more probabilistic arguments. (20.4) 30–32.
Sheng, Xiang, and Spurr, Michael J. Symmetries of fractals. (18.1) 35–42.
Shenitzer, Abe. The Cinderella career of projective geometry. (13.2) 50–55.
Shenitzer, Abe. In memory of my friend Wilhelm Magnus. (17.2) 63–64.
Shenitzer, Abe. See Fauvel, John, and Shenitzer, Abe.
Shepp, Lawrence A., Letters of recommendation. (13.4) 4–5.
Shepp, Lawrence A. A moral dilemma. (16.4) 3.
Shepp, Lawrence A., Schuster, Seymour, Sadosky, Cora, Graham, Ronald L., Davis, Chandler, Cho, Zang-Hee. The Rewards of Honesty? (19.3) 4–5.
Shepp, Lawrence A., and Veklerov, Eugene. Russophobia. (12.3) 4.
Sher, R.B. Max Dehn and Black Mountain College. (16.1) 54–55.
Shields, Allen. Felix Hausdorff: Grundzüge der Mengenlehre. (11.1) 6–10.
Shields, Allen. Egorov and Luzin: Part 2. (11.2) 5–8.
Shields, Allen. Banach algebras, 1939–1989. (11.3) 15–17.
Shields, Allen. Lejeune Dirichlet and the birth of analytic number theory: 1837–1839. (11.4) 7–11.
Shub, Michael. Mysteries of mathematics and computation. (16.1) 10–15.
Shubin, M.A. See Palmeira, F., and Shubin, M.A.
Sibley, Tom. A fractal is (with apologies to Gertrude Stein). (20.2) 22.
Siegmund-Schultze, Reinhard. Dealing with the political past of East German mathematics. (15.4) 27–36.
Sierksma, Gerard. Johann Bernoulli (1667–1748): his ten turbulent years in Gröningen. (14.4) 22–31.
Sigmund, Karl. A philosopher's mathematician: Hans Hahn and the Vienna Circle. (17.4) 16–29.
Sigmund, Karl. See Helmberg, Gilbert, and Sigmund, Karl.
Simons, Stephen. An eigenvector proof of Fatou's lemma for continuous functions. (17.3) 67–70.
Simpson, Adrian P. The infidel is innocent. (12.3) 43–51.
Singleton, D. More on optimal lacings. (19.3) 6–7.
Sizer, Walter S. Mathematical notions in preliterate societies. (13.4) 53–60.
Skinner, Iain. Quetelet and Dandelin of Brussels. (19.4) 55–57.
Slade, Gordon. Self-avoiding walks. (16.1) 29–35.
Sloane, N.J.A. See Conway, J.H., Hales, T.C., Muder, D.J. and Sloane, N.J.A.
Smale, Steve. The story of the higher dimensional Poincaré conjecture (what actually happened on the beaches of Rio). (12.2) 44–51.
Smale, Steve. Finding a horseshoe on the beaches of Rio. (20.1) 39–44.
Smale, Steve. Mathematical problems for the next century. (20.2) 7–15.
Smith, H.J.S. Too many journals. (11.1) 35.
Spalt, Detlef. Quo vadis—history of mathematics? (16.3) 35.
Speiser, David. The Bernoullis in Basel. (14.4) 46–47.
Speiser, David. Review of *The Bernoulli Edition: The Collected Scientific Papers of the Mathematicians and Physicists of the Bernoulli Family.* (14.4) 63–64.
Sprows, David J. What's hot and what's not. (12.2) 25.
Spurr, Michael J. See Sheng, Xiang, and Spurr, Michael J.
Ssembatya, Vincent, and Vince, Andrew. Mathematics in Uganda. (19.3) 27–32.
Stanton, Nancy K. The Riemann mapping non-theorem. (14.1) 32–36.
Stein, Howard. Greek geometry and π. (12.2) 25–26.
Stein, Sherman K. Packing tripods. (17.2) 37–39.
Stein, S.K. Exactly how did Newton deal with his planets? (18.2) 6–11.
Steiner, Richard. Predictions and the spiteful computer. (15.2) 3.
Stewart, Ian. A nice little earner. (11.1) 10–11.
Stewart, Ian. Review of *A Budget of Trisections*, by Underwood Dudley. (14.1) 73–77.
Stewart, Ian. Which is to be master II. (15.1) 5.
Stewart, Ian. Four encounters with Sierpinski's gasket. (17.1) 52–64.
Stewart, Ian. See Cohen, Jack and Stewart, Ian.
Stillwell, John. Review of *Geometries and Groups*, by V.V. Nikulin and I.R. Shafarevich (translated by Miles Reid) (11.4) 63–67.
Stillwell, John. Eisenstein's footnote. (17.2) 58–62.
Stone, Marshall H. Reminiscences of mathematics at Chicago. (11.3) 20–25.
Strichartz, Robert S. An international language for mathematics. (11.1) 12–13.
Struik, Dirk. Dirk Struik replies. (11.3) 4.
Struik, Dirk. Review of *The Crest of the Peacock*, by George Gheverghese Joseph. (14.4) 66–68.
Sumners, De Witt. Untangling DNA. (12.3) 71–80.
Sumners, De Witt. Review of *The Knot Book; An Elementary Introduction to the Mathematical Theory of Knots*, by Colin Adams. (19.1) 74–75.
Sury, B. Mixed Motives. (19.2) 60.
Sutherland, Scott. See Gale, David, Propp, Jim, Sutherland, Scott, and Troubetzkoy, Serge.
Sutner, Klaus. Linear cellular automata and the Garden-of-Eden. (11.2) 49–53.
Sylvester, J.J. Kepler's apostrophe. (20.3) 37.
Szekeres, George. Review of *Polynomials (Problem Books in Mathematics)*, by E.J. Barbeau. (14.1) 78–79.
Szökefalvi-Nagy, Bela. Lie and Killing. (12.2) 24.
Szyld, Daniel B. Ulam and Beethoven. (15.3) 7.
Szymanski, Waclaw. Who was Otto Nikodym? (12.2) 27–31.
Takács, Lajos. Riesz's problem. (12.2) 24–25.

Taylor, Alan D., see Brams, Steven J., Taylor, Alan D., and Zwicker, William S.
Taylor, Jean. See Senechal, Marjorie, and Taylor, Jean.
Temam, R. Inertial manifolds. (12.4) 68–74.
Tetsuka, Akiko. Optimal lacings. (3) 6.
Thiele, Rudiger. A French officer in Prussian Magdeburg. (15.1) 53–57.
Thiele, Rudiger. Mathematics in Göttingen (1737–1866). (16.4) 50–59.
Thistlethwaite, Morwen. See Hoste, Jim, Thistlethwaite, Morwen, and Weeks, Jeff.
Todd, John. Review of *Pi and the AGM. A Study in Analytic Number Theory and Computational Complexity*, by Jonathan M. Borwein and Peter B. Borwein. (11.3) 73–77.
Todd, John. G.H. Hardy as an editor. (16.2) 32–37.
Todd, Olga Taussky. Brouwer and Hilbert. (13.1) 4.
Toussaint, Godfried. A new look at Euclid's second proposition. (15.3) 12–23.
Traub, J.F., and Woźniakowski, H. Information-based complexity: new questions for mathematicians. (13.2) 34–43.
Traub, J.F., and Werschulz, A.G. Linear ill-posed problems are solvable on the average for all Gaussian measures. (16.2) 42–48.
Treitz, Klaus. The Jubilee maze. (15.4) 54–57.
Troubetzkoy, Serge. See Gale, David, Propp, Jim, Sutherland, Scott, and Troubetzkoy, Serge.
Tuynman, Gijs M. Numerology. (18.2) 5.
van Dalen, D. The war of the frogs and the mice, or the crisis of the *Mathematische Annalen*. (12.4) 17–31.
van Dijk, Gerrit. Thomas Joannes Stieltjes: honorary doctor of Leiden University. (16.1) 52–53.
Varian, Hal R. Mathematics in social sciences. (11.1) 3–4.
Veklerov, Eugene. See Shepp, Lawrence A., and Veklerov, Eugene.
Velleman, Daniel, Fermat's Last Theorem and Hilbert's program. (19.1) 64–67.
Vershik, A. Admission to the mathematics faculty in Russia in the 1970s and 1980s. (16.4) 4–5.
Vershik, A.M. A dangerous joke. (20.2) 40.
Vershik, A.M., Viro, O. Ya., and Bokuť, L.A. To guard the future of Soviet mathematics. (14.1) 12–15.
Videla, Carlos R., On points constructible from conics. (19.2) 53–57.
Vilkov, Lev V. See Hargittai, István, and Vilkov, Lev V.
Vince, Andrew. See Ssembatya, Vincent, and Vince, Andrew.
Viro, Oleg. See Itenberg, Ilia, and Viro, Oleg.
Viro, O. Ya. See Vershik, A.M., Viro, O. Ya., and Bokuť, L.A.
Vitanyi, Paul, see Kirchherr, Walter, Li, Ming, and Vitanyi, Paul.
Wagon, Stan. Review of *The Mathematics Book*, 3rd edition, by Wolfram Media. (19.3) 59–67.
Wagon, Stan. Review of *Mathematica 3.0*. Software issued by Wolfram Research Inc. (19.3) 59–67.
Wallace, D.A.R. Founding the European Mathematical Society. (14.1) 8–10.
Walsh, Timothy. Completely nonplussed. (19.4) 77.
Walsh, Timothy R. The generalized towers of Hanoi for space-deficient computers and forgetful humans. (20.1) 32–38.
Ward, Thomas. *Lex Talionis.* (20.2) 4.
Waterhouse, William C. Sarcasm? (12.3) 5–6.
Waterhouse, William C. Mathematics and history. (16.2) 3–4.
Waterhouse, William C. In defense of Curtis. (19.2) 6.
Weeks, Jeff. See Hoste, Jim, Thistlethwaite, Morwen, and Weeks, Jeff.
Weidlinger, Paul. A Ramanujan puzzle. (17.4) 3.
Weintraub, Steven H. Problems. (11.1) 53.
Weintraub, Steven H. Problems. (11.2) 31–32.
Weintraub, Steven H. Problems. (11.3) 26–28.
Weintraub, Steven H. Problems. (11.4) 48–49.
Weintraub, Steven H. Problems. (12.1) 56–57.
Weintraub, Steven H. Problems. (12.2) 66–67.
Weintraub, Steven H. Problems. (12.3) 64–68.
Weintraub, Steven H. Problems. (12.4) 65–67.
Wells, David. Are these the most beautiful? (12.3) 37–41.
Wermer, John. Recollections of Arne Beurlng. (15.3) 32–33.
Werschulz, A.G. See Traub, J.F., and Werschulz, A.G.
Wheeler, David. Review of *Ethnomathematics: A Multicultural View of Mathematical Ideas*, by Marcia Ascher. (14.4) 64–66.
White, Brian. Some recent developments in differential geometry. (11.4) 41–47.
Whitemore, Hugh. Writing about Alan Turing. (13.4) 26–30.
Whitman, Betsey S. An American woman in Göttingen. (15.1) 60–62.
Whittle, Peter. Review of *Probability Theory: An Analytic View*, by Daniel W. Stroock. (18.3) 71–74.
Wilf, Herbert S. Review of *Handbook of Combinatorics*, by Graham, R.L., Grötschel, M., and Lovász, L. (eds). (19.2) 68–69.
Williams, Floyd L. History and variation on the theme of the Frobenius reciprocity theorem. (13.3) 68–71.
Williams, H.P. The Cornish caveman mathematician. (17.1) 34.
Williams, Hugh. See Shallit, Jeffrey, Williams, Hugh C., and Morain, François.
Williams, Kim. The sacred cut revisited: the pavement of the Baptistery of San Giovanni, Florence. (16.2) 18–24.
Williams, Kim. The Pavements of the Cosmati. (19.1) 41–45.
Williams, Kim. What Piero painted. (20.2) 4.
Wills, J.M. Spheres and sausages, crystals and catastrophes—and a joint packing theory. (20.1) 16–21.
Wilson, John. The Glass Bead Game. (19.2) 23–25.
Wilson, Robin. Euclid and Hipparchus. (11.1) 72.
Wilson, Robin. Nicaraguan stamps. (11.2) 72.
Wilson, Robin. Mathematics in the Low Countries. (11.3) 80.
Wilson, Robin. Mathematics education. (11.4) 71.
Wilson, Robin. Graphs on stamps. (12.1) 80.
Wilson, Robin. Computer-designed stamps. (12.2) 80.
Wilson, Robin. International Congress of Mathematicians. (12.3) 84.
Wilson, Robin. Czech and Slovak mathematics. (12.4) 79.
Wilson, Robin. Impossible figures. (13.1) 80.
Wilson, Robin. Nineteenth-century analysis. (13.2) 80.
Wilson, Robin. Mathematics in the seventeenth century. (13.3) 84.
Wilson, Robin. Computing on stamps. (13.4) 79.
Wilson, Robin. Probability and statistics (1750–1850). (14.1) 80.
Wilson, Robin. Polish mathematics. (14.2) 80.
Wilson, Robin. Greek mathematics I. (14.3) 76.
Wilson, Robin. Greek mathematics II. (14.4) 74.
Wilson, Robin. Greek mathematics III—Archimedes. (15.1) 76.
Wilson, Robin. Greek mathematics IV—The School of Alexandria. (15.2) 76.
Wilson, Robin. Metrication. (15.3) 76.
Wilson, Robin. Islamic mathematics and astronomy I. (15.4) 74.
Wilson, Robin. Islamic mathematics and astronomy II. (16.1) 76.
Wilson, Robin. Russian mathematics I. (16.2) 76.
Wilson, Robin. Russian mathematics II. (16.3) 76.
Wilson, Robin. Swiss mathematics. (16.4) 78.
Wilson, Robin. Renaissance mathematics textbooks. (17.1) 76.
Wilson, Robin. 1996 anniversaries. (18.4) 80.

Wilson, Robin. Abel. (19.1) 80.
Wilson, Robin. Stamps of Unusual Shape I. (19.2) 72.
Wilson, Robin. Stamps of Unusual Shape II. (19.3) 76.
Wilson, Robin. Isaac Newton. (20.3) 71.
Wilson, Robin. See Barrow-Green, June, and Wilson, Robin.
Wilson, Robin. See Flood, Raymond, and Wilson, Robin.
Wilson, Robin. See Hannabuss, Keith, and Wilson, Robin.
Wilson, Robin. See Pisanski, Tomaz, and Wilson, Robin.
Wimp, Jet. Review of *Selected Problems in Real Analysis Volume 107, AMS Series of Translations of Mathematical Monographs*, by B.M. Makarov, M.G. Goluzina, A.A. Lodkin, and A.N. Podkorytov. (16.4) 68–72.
Wimp, Jet. Review of *Polynomials and Polynomial Inequalities*, by Peter Borwein and Tamas Erdelyi. (18.3) 76–79.
Wimp, Jet. Review of *Potential Theory in the Complex Plane*, by Thomas Ransford. (18.4) 72.
Wimp, Jet. Review of *Contests in Higher Mathematics: Miklos Schweitzer Competitions 1962–1991*, edited by Gábor J. Székely. (18.4) 72–73.
Wimp, Jet. Review of *Catastrophe Theory*, by V.I. Arnol'd. (18.4) 73–74.
Wimp, Jet. Review of *Real Computing Made Real: Preventing Errors in Engineering and Scientific Calculations*, by Forman S. Acton. (18.4) 74–75.
Wimp, Jet. Review of *The Queen of Mathematics: An Introduction to Number Theory*, by W.S. Anglin. (18.4) 75–76.
Wimp, Jet. Review of *A Primer on Nonlinear Analysis*, by A. Ambrosetti and G. Prodi. (18.4) 76–77.
Wimp, Jet. Review of *Out of Their Minds: The Lives and Discoveries of 15 Great Computer Scientists*, by Dennis Shasha and Cathy Lazere. (18.4) 77–78.
Wimp, Jet. Review of *Five Hundred Mathematical Challenges*, by Edward Barbeau, William Moser, and Murray Klamkin. (18.4) 78–79.
Wimp, Jet. Review of *A Tour of the Calculus*, by David Berlinski. (19.3) 70–75.
Wimp, Jet. Review of *The World According to Wavelets*, by Barbara Burke Hubbard. (19.3) 70–75.
Wimp, Jet. Review of *Calculus Lite*, by Frank Morgan. (19.3) 70–75.
Wimp, Jet. Review of *To Catch the Spirit: the Memoir of A.C. Aitken*, by A.C. Aitken, with a biographical introduction by P.C. Fenton. (20.2) 62–79.
Wimp, Jet. Review of *Determinants and Matrices*, by A.C. Aitken. (20.2) 62–79.
Wimp, Jet. Review of *The Case against Decimalisation*, by A.C. Aitken. (20.2) 62–79.
Wimp, Jet. Review of *Gallipoli to the Somme: Recollections of a New Zealand Infantryman*, by A.C. Aitken. (20.2) 62–79.
Wong, Roderick. Review of *Special Functions*, by Nico Temme. (19.4) 75–76.
Woodin, W. Hugh. Large cardinal axioms and independence: the continuum problem revisited. (16.3) 31–35.
Woźniakowski, H. See Traub, J.F. and Woźniakowski, H.
Wu, H. Review of *Functions and Graphs*, by I.M. Gelfand, E.G. Glagoleva, and E.E. Shnol. (17.1) 68–75.
Wu, H. Review of *The Method of Coordinates*, by I.M. Gelfand, E.G. Glagoleva, and A.A. Kirillov. (17.1) 68–75.
Wu, H. Review of *Algebra*, by I.M. Gelfand and A. Shen. (17.1) 68–75.
Yarnall, Keith. Review of *An Equation that Changed the World: Newton, Einstein & the Theory of Relativity* by Harald Fritzsch. (19.2) 67–68.
Yarnall, Keith. See Milligan, Lloyd and Yarnall, Kenneth.
Yellin, Joel. A scholar's tale. (13.4) 27.
Yevick, Miriam L. The happy (non-formalist) mathematician. (14.1) 4–6.
Zalcman, Lawrence. Review of *Littlewood's Miscellany*, edited by Béla Bollabás. (11.1) 63–65.
Zalcman, Lawrence. Mathematicians sweep 1988 Wolf Prizes. (11.2) 39–48.
Zalcman, Lawrence. Review of *Darstellung und Begründung einiger neuerer Ergebnisse der Funktionentheorie (dritte, erweiterte Auflage)* by Edmund Landau and Dieter Gaier. (11.4) 61–63.
Zalcman, Lawrence. Review of *Discrete Thoughts: Essays on Mathematics, Science and Philosophy*, by Mark Kac, Gian-Carlo Rota, and Jacob T. Schwartz. (12.3) 81–83.
Zalcman, Lawrence. Review of *The Apprenticeship of a Mathematician*, by André Weil. (15.4) 64–68.
Zambrini, J.C. Schrödinger's time reversal and quantum mechanics. (19.2) 5–6.
Zdravkovska, Smilka. Listening to Igor Rostislavovich Shafarevich. (11.2) 16–28.
Zdravkovska, Smilka. To my partner, to Allen Shields. (12.2) 4–7.
Zeilberger, Doron. Theorems for a price: tomorrow's semi-rigorous mathematical culture. (16.4) 11–14.
Zeilberger, Doron. How Joe Gillis discovered combinatorial special function theory. (17.2) 65–66.
Zerger, Monte J. Student questions you love to hate. (16.4) 29–30.
Zerger, Monte J. A quote a day educates. (20.2) 5–6.
Zerner, Martin. Review of *Mathématiques à Venir*, by Karine Chemla and Ivar Ekeland. (13.2) 76–79.
Zerner, Martin. Review of *Mathematics Tomorrow*, by Lynn Arthur Steen, (13.2) 76–79.
Zhang, D.Z. C.N. Yang and contemporary mathematics. (15.4) 13–21.
Zhang, S. See Schweigman, C., and Zhang, S.
Zweifel, P.F. See Nonnenmacher, Dirk J.F., Nonnenmacher, Theo F., and Zweifel, P.F.
Zwicker, William S. See Brams, Steven J., Taylor, Alan D., and Zwicker, William S.

Books Reviewed

Acton, Forman S. *Real Computing Made Real: Preventing Errors in Engineering and Scientific Calculations.* Reviewed by Jet Wimp. (18.4) 74–75.
Adams, Colin. *The Knot Book; An Elementary Introduction to the Mathematical Theory of Knots.* Reviewed by De Witt Sumners. (19.1) 74–75.
Aitken, A.C., with a biographical introduction by P.C. Fenton. *To Catch The Spirit: The Memoir of A.C. Aitken.* Reviewed by Jet Wimp. (20.2) 62–79.
Aitken, A.C. *Determinants and Matrices.* Reviewed by Jet Wimp. (20.2) 62–79.
Aitken, A.C. *The Case Against Decimalisation.* Reviewed by Jet Wimp. (20.2) 62–79.
Aitken, A.C. *Gallipoli to the Somme: Recollections of a New Zealand Infantryman.* Reviewed by Jet Wimp. (20.2) 62–79.
Ambrosetti, A. and Prodi, G. *A Primer on Nonlinear Analysis.* Reviewed by Jet Wimp. (18.4) 76–77.
Anglin, W.S. *The Queen of Mathematics: an Introduction to Number Theory.* Reviewed by Jet Wimp. (18.4) 75–76.
Arnol'd, V.I. *Catastrophe Theory.* Reviewed by Jet Wimp. (18.4) 73–74.
Arbib, Michael and Ewert, Jörg-Peter (editors). *Visual Structures and Integrated Functions.* Reviewed by Shimon Edelman. (15.4) 68–70.
Ascher, Marcia. *Ethnomathematics: a Multicultural View of Mathematical Ideas.* Reviewed by David Wheeler. (14.4) 64–66.
Barbeau, E.J. *Polynomials (Problem*

Books in Mathematics). Reviewed by George Szekeres. (14.1) 78–79.

Barbeau, Edward, Moser, William, and Klamkin, Murray. *Five Hundred Mathematical Challenges.* Reviewed by Jet Wimp. (18.4) 78–79.

Bednarek, Al, and Ulam, Françoise, eds. *Analogies Between Analogies. The Mathematical Reports of S.M. Ulam and His Los Angeles Collaborators.* Reviewed by Reuben Hersh. (14.4) 71–73.

Berggren, Lennert, Borwein, Jonathan, and Borwein, Peter. *Pi: A Source Book.* Reviewed by Dan Schnabel. (20.3) 64–65.

Berlinski, David. *A Tour of the Calculus.* Reviewed by Jet Wimp. (19.3) 70–75.

Berndt, Bruce C. *Ramanujan's Notebooks, Part III.* Reviewed by George E. Andrews. (16.3) 69–71.

Bölling, Reinhard (editor). *A Photo Album for Weierstrass.* Reviewed by R.B. Burckel. (18.1) 78–79.

Borst, Arno. *Das mittelalterliche Zahlenkampfspiel.* Reviewed by Benno Artmann. (11.3) 77–79.

Borwein, Jonathan M. and Borwein, Peter B. *Pi and the AGM. A Study in Analytic Number Theory and Computational Complexity.* Reviewed by John Todd. (11.3) 73–77.

Borwein, Peter and Erdelyi, Tamas. *Polynomials and Polynomial Inequalities.* Reviewed by Jet Wimp. (18.3) 76–79.

Boskoff, W.G. *Hyperbolic Geometry and Barbilian Space.* Reviewed by Victor Pambuccian. (20.4)

Brams, Steven J. *Theory of Moves.* Reviewed by Marc Kilgour. (19.3) 68–70.

Bressoud, David. *A Radical Approach to Real Analysis.* Reviewed by Ivor Grattan-Guinness. (17.4) 68–70.

Brezinski, Claude. *History of Continued Fractions and Padé approximants.* Reviewed by William B. Jones. (15.3) 71–73.

Brieskorn, Egbert and Knorrer, Horst. *Plane Algebraic Curves.* Reviewed by Art Schwartz. (12.2) 74–78.

Casti, John L. *Searching for Uncertainty: What Scientists Can Know About the Future.* Reviewed by Manfred Schroeder. (16.3) 72.

Chipman, Susan F., Brush, Lorelei R., and Wilson, Donna M. (editors). *Women and Mathematics: Balancing the Equation.* Reviewed by Neal Koblitz. (13.1) 77–78.

Colton, D. and Kress, R. *Inverse Acoustic and Electromagnetic Scattering Theory.* Reviewed by Pierre Sabatier. (16.2) 73–75.

Connes, Alain. *Noncommutative Geometry.* Reviewed by Jonathan Block. (20.1) 73–75.

Coolidge, Julian Lowell. *The Mathematics of Great Amateurs* (2nd ed). Reviewed by David M. Burton. (14.3) 68–69.

Corduneanu, Constantin. *Integral Equations and Applications.* Reviewed by Thomas S. Angell (16.1) 63–67.

Croft, H.T., Falconer, K.J., and Guy, R.K. *Unsolved Problems in Geometry.* Reviewed by Dennis DeTurck. (15.1) 71–72.

Davies, Paul ed. *The New Physics.* Reviewed by Philip W. Anderson. (14.1) 70–71.

Davis, Philip J. *Spirals: from Theodorus to Chaos.* Reviewed by Michele Emmer. (18.1) 75–78.

Davis, Philip J. and Hersh, Reuben. *Descartes' Dream: the World According to Mathematics.* Reviewed by Robert Osserman. (11.2) 66–70.

Dawson, John W. Jr. *Logical Dilemmas: The Life and Work of Kurt Gödel.* Reviewed by Craig N. Bach. (20.4) 61–64.

Devlin, Keith. *The Joy of Sets.* Reviewed by J. Donald Monk. (17.2) 71–73.

Dixmier, Jacques. *L'Aurore des Dieux.* Reviewed by David M. Bressoud (16.3) 72–74.

Dudley, Underwood. *A Budget of Trisections.* Reviewed by Ian Stewart. (14.1) 73–77.

Duren, Peter, assisted by R.A. Askey, H.M. Edwards, and U.C. Merzbach. *A Century of Mathematics in America.* 3 vols. Reviewed by W.H.J. Fuchs and Lee Lorch. (13.4) 74–78.

Earman, John. *Bayes or Bust?: a Critical Examination of Bayesian Confirmation Theory.* Reviewed by Evelyn Mitchell. (16.4) 66–68.

Educational Poster. *Solving the Quintic.* Reviewed by Eric Schechter. (17.3) 71–73.

Egorov, Yu. V. and Shukin, M.A. *Partial Differential Equations I: Foundations of the Classical Theory, Encyclopedia of Mathematical Sciences, Vol. 30.* Reviewed by David Colton. (15.3) 69–71.

Ekeland, Ivar. *Mathematics and the Unexpected.* Reviewed by Cathleen S. Morawetz. (13.3) 81–83.

Emmer, Michele. Special Issue of *Leonardo,* Visual Mathematics. Reviewed by Harold L. Dorwart. (16.1) 70–72.

Ewing, John, ed. *A Century of Mathematics.* Reviewed by Underwood Dudley. (17.2) 73–74.

Farin, Gerald. *Curves and Surfaces for Computer Aided Geometric Design* (2nd ed). Reviewed by Len Bos (14.3) 66–68.

Faux, I.D. and Pratt, M.J. *Computational Geometry for Design and Manufacture.* Reviewed by Art Schwartz. (12.2) 74–78.

Ferguson, Claire. *Helamon Ferguson: Mathematics in Stone and Bronze.* Reviewed by J.W. Cannon. ((18.2) 73–75.

Fischer, Gerd, Hirzebruch, Friedrich, Scharlau, Winfried, and Tornig, Willi (editors). *Ein Jahrhundert Mathematik, 1890–1990: Festschrift zum Jubiläum der DMV.* Reviewed by David E. Rowe. (13.4) 70–78.

Gelfand, I.M., Glagoleva, E.G., and Shnol, E.E. *Functions and Graphs.* Reviewed by H. Wu. (17.1) 68–75.

Gelfand, I.M., Glagoleva, E.G., and Kirillov, A.A. *The Method of Coordinates.* Reviewed by H. Wu. (17.1) 68–75.

Gelfand, I.M., and Shen, A. *Algebra.* Reviewed by H. Wu. (17.1) 68–75.

Gleick, James. *Chaos: Making a New Science.* Reviewed by John Franks. (11.1) 65–69.

Goodstein, David L., and Goodstein, Judith R. *Feynman's Lost Lecture.* Reviewed by Graham W. Griffiths. (20.3) 68–70.

Graham, R.L., Grötschel, M. and Lovász, L. (editors). *Handbook of Combinatorics.* Reviewed by Herbert S. Wilf. (19.2) 68–69.

Graham, Ronald L., Rothschild, Bruce L., and Spencer, Joel H. *Ramsey Theory.* Reviewed by Richard K. Guy. (15.1) 70–71.

Gregory, J.A. (editor). *The Mathematics of Surfaces.* Reviewed by Art Schwartz. (12.2) 74–78.

Hamming, Richard W. *The Art of Doing Science and Engineering: Learning to Learn.* Reviewed by Roger Pinkham. (20.3) 67–68.

Hargittai, István, ed. *Symmetry: Unifying Human Understanding.* Reviewed by Michele Emmer. (12.4) 75–78.

Hargittai, István, and Hargittai, Magdolna. *Symmetry Through the Eyes of a Chemist.* Reviewed by Michele Emmer. (12.4) 75–78.

Hubbard, Barbara Burke. *The World According to Wavelets.* Reviewed by Jet Wimp. (19.3) 70–75.

Ibramigov, Nail H (editor). *Handbook of Lie Group Analysis of Differential Equations: Applications in Engineering and Physical Sciences.* Reviewed by Robert Gilmore. (19.1) 71–74.

Illmer, Detlef. *Rhythmomachia.* Reviewed by Benno Artmann (11.3) 77–79.

Jones, A., Morris, S.A., and Pearson, K.R. *Abstract Algebra and Famous Impossibilities.* Reviewed by Israel Kleiner. (15.3) 73–75.

Joseph, George Gheverghese *The Crest of the Peacock.* Reviewed by D.J. Struik. (14.4) 66–68.

Kac, Mark, Rota, Gian-Carlo, and

Schwartz, Jacob T. *Discrete Thoughts: Essays on Mathematics, Science and Philosophy.* Reviewed by Lawrence Zalcman. (12.3) 81–83.

Katok, Anatole, and Strelcyn, Jean-Marie. *Invariant Manifolds; Entropy and Billiards; Smooth Maps with Singularities.* Reviewed by Ya. B. Pesin. (18.3) 74–75.

Katz, Victor J. *A History of Mathematics: An Introduction.* Reviewed by Judith Victor Grabiner. (16.4) 73–76.

Kirsch, Andreas. *An Introduction to the Mathematical Theory of Inverse Problems.* Reviewed by David Colton. (19.4) 72–75.

Klee, Victor and Wagon, Stan. *Old and New Unsolved Problems in Plane Geometry and Number Theory.* Reviewed by Kenneth Falconer. (15.1) 72–75.

Koblitz, Neal. *A Course in Number Theory and Cryptography.* Reviewed by J.H. Loxton. (15.2) 63–67.

Korneichuk, N. *Exact Constants in Approximation Theory.* Reviewed by T.M. Mills. (16.1) 68–70.

Kozlov, Valerii V., and Treshchev, Dmitrii. *Billiards, a Genetic Introduction to the Dynamics of Systems with Impacts.* Reviewed by Ya. B. Pesin. (18.3) 74–75.

Kress, Rainer. *Linear Integral Equations.* Reviewed by Thomas S. Angell. (16.1) 63–67.

Landau, Edmund, and Gaier, Dieter. *Darstellung und Begründung einiger neuerer Ergebnisse der Funktionentheorie (dritte, erweiterte Auflage).* Reviewed by Lawrence Zalcman. (11.4) 61–63.

Lang, Serge E. *Undergraduate Analysis: 2nd Edition.* Reviewed by David M. Bressoud. (20.1) 76–77.

Lord, E.A., and Wilson, C.B. *The Mathematical Description of Shape and Form.* Reviewed by Art Schwartz. (12.2) 74–78.

Lützen, Jesper. *Joseph Liouville 1809–1882, Master of Pure and Applied Mathematics (Studies in the History of Mathematics and Physical Sciences 15).* Reviewed by J. Dieudonné. (14.1) 71–73.

Makarov, B.M., Goluzina, M.G., Lodkin, A.A., and Podkorytov, A.N. *Selected Problems in Real Analysis Volume 107, AMS Series of Translations of Mathematical Monographs.* Reviewed by Jet Wimp. (16.4) 68–72.

Marsland, T. Anthony, and Schaeffer, Jonathan eds. *Computers, Chess, and Cognition.* Reviewed by Robert Levinson. (15.2) 67–71.

Masani, Pesi R. *Norbert Wiener, 1894–1964.* Reviewed by Philip J. Davis. (17.4) 73–75.

Masani, Pesi R. *Norbert Wiener, 1894–1964.* Reviewed by Adrian Riskin. (17.4) 75–77.

Massey, William. *A Basic Course in Algebraic Topology.* Reviewed by Peter Hilton. (15.4) 62–64.

Maz'ya, V.G., and Prossdorf, S. *Linear and Boundary Integral Equations, Encyclopedia of Mathematical Sciences,* Vol. 27. Reviewed by David Colton. (15.3) 69–71.

Melter, Robert, Rosenfeld, Azriel, and Bhattacharya, Prabir, eds. *The Geometry of Vision.* Reviewed by Shimon Edelman. (15.4) 68–70.

Meyer, Y. *Wavelets: Algorithms and Applications.* Reviewed by Mary Beth Ruskai. (17.4) 70–73.

Morgan, Frank. *Calculus Lite.* Reviewed by Jet Wimp. (19.3) 70–75.

Moritz, Robert Edouard. *Memorabilia Mathematica: the Philomath's Quotation Book.* Reviewed by Donald M. Davis. (17.2) 69–70.

Naturforschende Gesellschaft, ed. *The Bernoulli Edition: The Collected Scientific Papers of the Mathematicians and Physicists of the Bernoulli Family.* Reviewed by David Speiser. (14.4) 63–64.

Nikulin, V.V., and Shafarevich, I.R. (translated by Miles Reid). *Geometries and Groups.* Reviewed by John Stillwell. (11.4) 63–67.

Omnes, Roland. *The Interpretation of Quantum Mechanics.* Reviewed by Robert Gilmore. (18.1) 70–75.

Ostebee, Arnold, and Zorn, Paul. *Calculus from Graphical, Numerical, and Symbolic Points of View.* Reviewed by Herb Clemens. (18.4) 67–69.

Parker, Marla (editor). *She Does Math!: Real-Life Problems from Women on the Job.* Reviewed by Marci Perlstadt. (19.2) 69–71.

Penrose, Roger. *The Emperor's New Mind: Concerning Computers, Minds and the Laws of Physics.* Reviewed by Marjorie Senechal. (14.2) 72–77.

Pipkin, Allen C. *A Course on Integral Equations.* Reviewed by Thomas S. Angell. (16.1) 63–67.

The Poetry of Wallace Stevens. Comments by Jonathan Holden. (12.1) 77.

Pólya, George. *The Pólya Picture Album: Encounters of A Mathematician,* edited by G.L. Alexanderson. Reviewed by Lee Lorch (11.2) 70–71.

Porter, David, and Stirling, David G. *Integral Equations: a Practical Treatment from Spectral Theory to Applications.* Reviewed by Thomas S. Angell. (16.1) 63–67.

Porter, Roy (Consultant Editor). *The Biographical Dictionary of Scientists,* 2nd edition. Reviewed by Donald M. Davis. (17.3) 73–75.

Ransford, Thomas. *Potential Theory in the Complex Plane.* Reviewed by Jet Wimp. (18.4) 72.

Reid, Constance. *The Search for E.T. Bell Also Known as John Taine.* Reviewed by David M. Bressoud. (16.3) 72–74.

Rényi, Alfred. *A Diary on Information Theory.* Reviewed by Gregory J. Chaitin. (14.4) 69–70.

Resnikoff, Howard. *The Illusion of Reality.* Reviewed by Shimon Edelman. (15.4) 68–70.

Richards, Joan. *Mathematical Visions: The Pursuit of Geometry in Victorian England.* Reviewed by Thomas Drucker. (14.2) 77–79.

Roman, Steven. *An Introduction to Coding and Information Theory.* Reviewed by S.C. Coutinho. (20.3) 65–67.

Rosenthal, Eric. *Advanced Calculus of Murder.* Reviewed by Mary W. Gray. (12.1) 77–79.

Rothstein, Edward. *Emblems of Mind: the Inner Life of Music and Mathematics.* Reviewed by Leonard Gillman. (20.3) 60–64.

Sagan, Hans. *Space-Filling Curves.* Reviewed by John Holbrook. (19.1) 69–71.

Schattschneider, Doris. *Visions of Symmetry: Notebooks, Periodic Drawings, and Related Work of M.C. Escher.* Reviewed by Marjorie Senechal. (14.2) 72–77.

Schmalz, Rosemary. *Out of the Mouths of Mathematicians: A Quotation Book for Philomaths.* Reviewed by Donald M. Davis (17.2) 69–70.

Shasha, Dennis, and Lazere, Cathy. *Out of Their Minds: The Lives and Discoveries of 15 Great Computer Scientists.* Reviewed by Jet Wimp. (18.4) 77–79.

Steen, Lynn Arthur. *Mathematics Tomorrow.* Reviewed by Martin Zerner. (13.2) 76–79.

Stenger, Frank. *Numerical Methods Based on Sinc and Analytic Functions.* Reviewed by Kenneth L. Bowers. (18.2) 71–73.

Stewart, Ian. *The Problems of Mathematics.* Reviewed by Cathleen S. Morawetz. (13.3) 81–83.

Stewart, Ian. *The Problems of Mathematics,* 2nd edition. Reviewed by David M. Bressoud. (15.4) 71–73.

Stewart, Ian. *Nature's Numbers.* Reviewed by Freeman Dyson. (19.2) 65–67.

Stillwell, John. *Mathematics and its History.* Reviewed by John Fauvel and Abe Shenitzer. (14.3) 69–73.

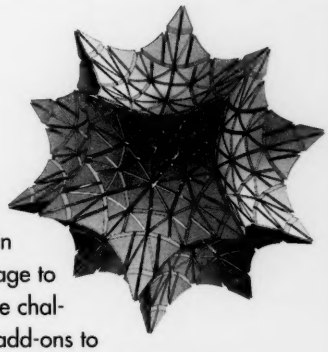
Stoppard, Tom. *Arcadia*: A Play. Reviewed by Mary W. Gray. (17.2) 67–68.

Straffin, Philip D. *Game Theory and Strategy.* Reviewed by Marc Kilgour. (19.3) 68–70.

Stroock, Daniel W. *Probability Theory: An Analytic View.* Reviewed by Peter Whittle. (18.3) 71–74.

Struik, Dirk J. *A Source Book in Mathematics, 1200–1800.* Reviewed by Craig G. Fraser. (11.4) 68–70.
Székely, Gábor J. *Contests in Higher Mathematics*: Miklos Schweitzer Competitions 1962–1991. Reviewed by Jet Wimp. (18.4) 72–73.
Temme, Nico. *Special Functions.* Reviewed by Roderick Wong. (19.4) 75–76.
Ulam, Stanislaw. *Sets, Numbers and Universes*, and *Science, Computers, and People. From The Tree of Mathematics.* Reviewed by Reuben Hersh. (14.4) 71–73.
vos Savant, Marilyn. *The World's Most Famous Math Problem.* Reviewed by Lloyd Milligan and Keith Yarnall. (16.3) 66–69.
Weil, André. *The Apprenticeship of a Mathematician.* Reviewed by Lawrence Zalcman. (15.4) 64–68.
Wiener, Norbert. *Invention: The Care and Feeding of Ideas* (introduction by S.J. Heims). Reviewed by Philip J. Davis. (17.4) 73–75.
Wilf, Herbert. *generatingfunctionology.* Reviewed by E. Rodney Canfield. (15.2) 71–75.
Winfree, Arthur T. *When Time Breaks Down: The Three-Dimensional Dynamics of Electrochemical Waves and Cardiac Arrhythmias.* Reviewed by Leon Glass. (15.1) 67–70.
Wolfram Media. *The Mathematics Book*, 3rd edition. Reviewed by Stan Wagon. (19.3) 59–67.
Wolfram Research Inc. *Mathematica 3.0.* Software. Reviewed by Stan Wagon. (19.3) 59–67.
Zeh, H.D. *The Physical Basis of the Direction of Time.* Reviewed by John C. Baez. (16.1) 72–75.

WOLFRAM
RESEARCH



Wolfram Research, makers of the world's only fully integrated technical computing system, *Mathematica*, is looking for bright and creative people who want to shape the future of technical computing.

***Mathematica* Programmer**

Wolfram Research is seeking experts in the *Mathematica* programming language to join our development team. You will be challenged as you develop and maintain add-ons to *Mathematica*; review code, syntax, and documentation; develop standards for design and procedures for maintenance; and provide technical advice about *Mathematica* programming to the company at large. Expertise in *Mathematica* programming is required. In addition, experience in C, C++, or other Unix shell languages is preferred.

To apply for this position or for more information about our company, visit our web site at **www.wolfram.com/opportunities**, send email to **resumes@wolfram.com**, or contact Human Resources, Wolfram Research, Inc., 100 Trade Center Drive, Champaign, IL 61820, fax: 217-398-0747.
AA/EOE

WOLFRAM
RESEARCH
LEADERS IN ADVANCED COMPUTING